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# **The Environmental Assessment and Management (TEAM) Guide: New York Supplement**

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March 2006  
Revised March 2010



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Final report

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Prepared for U.S. Army Corps of Engineers  
Washington, DC 20314-1000

**Abstract:** Environmental assessments help determine compliance with current environmental regulations. The U.S. Air Force, U.S. Army, Defense Logistics Agency (DLA), and Corps of Engineers (Civil Works) have adopted environmental compliance programs that identify compliance problems before they are cited as violations by the U.S. Environmental Protection Agency.

Since 1984, the U.S. Army Construction Engineering Research Laboratory, in cooperation with numerous Department of Defense (DOD) components, has developed environmental compliance assessment checklist manuals. The Environmental Assessment and Management (TEAM) Guide was developed for use by all DOD components. Currently there are five participating DOD components: the Air Force, Air National Guard, Army, Civil Works, and DLA. These agencies have agreed to share the development and maintenance of this Guide.

The Guide combines Code of Federal Regulations and management practices into a series of checklists that show legal requirements and the specific operations or items to review. TEAM Guide is supplemented by DOD component-specific manuals detailing DOD component regulations and policies. The New York Supplement was developed to be used in conjunction with the TEAM Guide, using existing New York state environmental legislation and regulations as well as suggested management practices.

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## FOREWORD

This is ERDC/CERL SR-06-15. The report is based on the information available on Enflex Federal and State Regulations of March 2010.

The research was performed for AEC MIPR 0010005589, technical monitor Mark DItmore; ANG MIPR F9WFEV0028G001, technical monitor is Chuck Smith; AGB W45XMA00130245, technical monitor is Phil Dao; Army Reserve MIPR10CODCD201, technical monitor is Roc Tschirhart; Commerce MIPR 1301-09-SA00110, technical monitor is Greg Falzetta; USACE Fund account 96x3123, technical monitor is John Coho; DHS IAG HSHQDC-08-X-00456, technical monitor is Peter Wixted; DLA MIPR SP1001090, technical monitor is Pam Hillis; USPS MOA-05-CERL-01, technical monitor is Sharon Marsh; and, State Department IAG F3NF369350G002, technical monitor is Janice Smith.

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CERL is an element of the U.S. Army Engineer Research and Development Center (ERDC), U.S. Army Corps of Engineers. The Director of ERDC is Dr. James R. Houston, and the Commander is COL Gary J



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## SECTION 1

### AIR EMISSIONS MANAGEMENT

#### New York Supplement, March 2010

This section covers the state requirements for Air Emissions Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Acquired Structure* - A structure donated or loaned from a property owner for the purpose of conducting fire training (6 NYCRR 215.1) [Added March 2010].
- *Act* - The Federal Clean Air Act, 42 U.S.C. Section 7401, et seq., as amended by Public Law 101-549, 15 Nov 1990 (6 NYCRR 200.1).
- *Adsorptive Cartridge Filter* - a replaceable cartridge filter that contains diatomaceous earth or activated clay as the filter medium (6 NYCRR 232.2).
- *Actual Emissions* - those emissions resulting from normal daily operations, verifiable by operating records or other compliance monitoring activities, averaged over the prior two yr or some other more representative time interval, justified by the applicant to the Department's satisfaction (6 NYCRR 201-2.1).
- *Administrator* - the Administrator of the United States Environmental Protection Agency or designee (6 NYCRR 200.1).
- *Aerosol Coating Product* - A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marketing applications (6 NYCRR 205.2) [Added March 2006].
- *Agricultural Land* - The land and on-farm buildings, equipment, manure processing and handling facilities, and practices that contribute to the production, preparation and marketing of crops, livestock and livestock products as a commercial enterprise, including a 'commercial horse boarding operation' and 'timber processing'. Such farm operation may consist of one or more parcels of owned or rented land, which parcels may be contiguous or noncontiguous to each other (6 NYCRR 215.1) [Added March 2010].
- *Agricultural Waste* - Any waste from naturally grown products such as vines, trees, and branches from orchards, leaves, and stubble. Agricultural waste does not include pesticide containers, fertilizer bags, large plastic storage bags (including bags commonly known as "Ag bags"), offal, tires, plastic grain bags, and other plastic or synthetic materials (6 NYCRR 215.1) [Added March 2010].
- *Air Cleaning Installation, Air Cleaning Device or Control Equipment* - any method, process or equipment that removes, reduces or renders less noxious air contaminants discharged into the outdoor atmosphere (6 NYCRR 200.1).
- *Air Contaminant or Air Pollutant* - A chemical, dust, compound, fume, gas, mist, odor, smoke, vapor, pollen, or any combination thereof (6 NYCRR 200.1).
- *Air Contaminant Emission Control System* - equipment designed for installation on a motor vehicle or motor vehicle engine for the purpose of reducing the air contaminants emitted from the motor vehicle or motor vehicle engine, or a system or engine modification on a motor vehicle or motor vehicle engine which causes a reduction

of air contaminants emitted from the motor vehicle or motor vehicle engine, including but not limited to exhaust control systems, fuel evaporation control systems and crankcase ventilating systems (6 NYCRR 218-1.2) [Added March 2003].

- *Air Contamination* - the presence in the outdoor atmosphere of one or more air contaminants which contribute or which are likely to contribute to a condition of air pollution (6 NYCRR 200.1).
- *Air Contamination Source* or *Emission Source* - any apparatus, contrivance or machine capable of causing emission of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system, air cleaning device, but excepting an indirect source of air contamination as defined in Part 203 of this Title. Where a process at an emission unit uses more than one apparatus, contrivance, or machine in combination, the combination may be considered a single emission source (6 NYCRR 200.1).
- *Air Pollution* - the presence in the outdoor atmosphere of one or more contaminants in quantities, of characteristics and of a duration which are or may be injurious to human, plant or animal life or to property or which unreasonably interfere with the comfortable enjoyment of life and property (6 NYCRR 200.1).
- *Annual* - refers to a period of time based upon a calendar yr commencing January 1st and terminating midnight December 31st (6 NYCRR 200.1).
- *Annual Throughput* - the amount of gasoline transferred into or dispensed from a gasoline dispensing site during twelve consecutive months (6 NYCRR 230.1).
- *Antenna Coating* - A coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals (6 NYCRR 205.2) [Added March 2006].
- *Antifouling Coating* - A coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the coating must be registered with both the EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. section 136 'et. seq'.)(see Table 1, section 200.9 of this Title) and with the department pursuant to Part 326 of this Title (6 NYCRR 205.2) [Added March 2006].
- *Applicable Requirement* - a standard or other requirement in State or Federal regulations required under the Act as it applies to an emissions unit or emissions source, including requirements that have been promulgated or approved by EPA through rulemaking at the time of issuance of a permit but have future effective compliance dates. Applicable requirements generally include the following (6 NYCRR 201-2.1):
  1. any standard or other requirement approved in the New York State Implementation Plan (SIP) that is effective at the time of permit issuance;
  2. any term or condition of any preconstruction permits issued pursuant to the requirements of Title I of the Act, including the Federal Prevention of Significant Deterioration (PSD) program or New Source Review in nonattainment areas, pursuant to Part 231 of this Title that are required under the Clean Air Act or are taken by a source to avoid an applicable requirement;
  3. any standard or requirement promulgated to control emissions under Section 111 of the Act (including the New Source Performance Standards or NSPS);
  4. any standard or other requirement promulgated under Section 112 of the Act, including any requirement to control the accidental release of regulated substances, pursuant to Section 112(r)(7) of the Act;
  5. any standard, regulation or other requirement of the Acid Rain Program under Title IV of the Act;
  6. any compliance assurance requirements established pursuant to Section 504(b) or Section 114(a)(3) of the Act
  7. any standard, regulation or other requirement governing municipal solid waste incineration and hospital/medical/infectious waste incineration promulgated under Section 129 of the Act;
  8. any standard, regulation or other requirement promulgated to protect stratospheric ozone under Title VI of the Act unless the Administrator has determined that such requirements need not be contained in a permit issued under this Part;



9. any standard or other requirement of the program to control air pollution from outer continental shelf facilities under Section 328 of the Act;
  10. any national ambient air quality standard, increment, or visibility requirement under Title I, Part C of the Act, but only as it would apply to portable operations;
  11. a standard or other requirement for consumer and commercial products, under Section 183(e) of the Act; and
  12. a standard or other requirement for tank vessels, under Section 183(f) of the Act.
- *Architectural Coating* - a coating to be applied to stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coating for the purposes of this rule (6 NYCRR 205.2) [Added March 2004; Revised March 2006]:
  - *Area Source* - for the purposes of Title V permitting, any stationary source of hazardous air pollutants that is not a major stationary source. For the purposes of this Part, the term "area source" shall not include motor vehicles or non-road vehicles (6 NYCRR 201-2.1).
  - *Articles* - clothing, garments, textiles, fabrics, leather goods, and the like, that are dry cleaned (6 NYCRR 232.2).
  - *Asphalt* - the dark brown to black cementitious material (solid, semisolid, or liquid in consistency) of which the main constituents are bitumens that occur naturally or as a residue of petroleum refining (6 NYCRR 211.1).
  - *Attainment Area* - any area of the state meeting all National Ambient Air Quality Standards (NAAQS) for a specific air contaminant as designated pursuant to section 107(d) of the Federal Clean Air Act .(NOTE: A list of such areas may be obtained from any office of the Department of Environmental Conservation.) (6 NYCRR 200.1) [Revised March 2008].
  - *Azeotropic Control Device* -a dry cleaning control system where the vapor stream from the dry cleaning machine drum is first cooled and condensed to reduce the concentration of perc in the vapor stream, and is then treated with water to further enhance the displacement of perc from the articles when the vapor stream is returned to the machine drum. There is no exhaust to the atmosphere during the drying cycle (6 NYCRR 232.2).
  - *Best Available Control Technology (BACT)* - an emission limitation or equipment standard based on the maximum degree of reduction of each contaminant emitted from stationary air contamination source which the Department determines is achievable for such source on a case-by-case basis considering:
    1. process, fuels, and raw material available and to be used
    2. engineering aspects of the application of various types of control technology that has been adequately demonstrated
    3. process and fuel changes
    4. respective costs of the application of all such control technologies, process changes, alternative fuels, etc.
    5. applicable state and Federal emission standards.

In no event shall application of BACT result in emissions of any contaminant that will exceed the emissions allowed by any applicable standard established (6 NYCRR 200.1).

- *Bitumens* - Black or brown materials including, but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and are obtained from natural deposits or as residues from the distillation of crude petroleum or coal (6 NYCRR 205.2) [Added March 2006].
- *Bituminous Roof Coating* - A coating which incorporates bitumens that is labeled and formulated exclusively for roofing (6 NYCRR 205.2) [Added March 2006].

- *Bituminous Roof Primer* - A primer which incorporates bitumens that is labeled and formulated exclusively for roofing (6 NYCRR 205.2) [Added March 2006].
- *Boiler* - a device that combusts fuel and produces steam or heats water or any other heat transfer medium (NYCRR 227-2.2) [Added March 2004].
- *Bond Breaker* - A coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured (6 NYCRR 205.2) [Added March 2006].
- *Byproduct Coke Oven Battery* - a process for the destructive distillation of coal and separation of gaseous and liquid distillates from the carbon residue or coke, which includes ovens, charging systems (including larry cars, jumper pipes, charging conveyors from coal storage and/or weigh bins), auxiliary gas collection systems, heating systems and flues, pushing systems, door machines, mud trucks, quench cars, quenching systems, desulfurization systems, sulfur recovery units, waste heat stacks and air cleaning devices or control equipment (including oven patching equipment, door hoods, sheds, and other hoods either movable or stationary and with or without water sprays (6 NYCRR 200.1).
- *Calcimine Recoaters* - Flat solvent borne coatings formulated and recommended specifically for recoating calcimine-painted ceilings and other calcimine-painted substrates (6 NYCRR 205.2) [Added March 2006].
- *California Standards* - those standards for motor vehicles and motor vehicle engines that the State of California has adopted and is permitted to adopt under 42 USC 7543 (see Table 1, section 200.9 of this Title) and that other states are permitted to adopt under 42 USC 7507 (see Table 1, section 200.9 of this Title) (6 NYCRR 218-1.2) [Added March 2003].
- *Camp Fire* - any outdoor open fire less than three feet in height, length and width or diameter (6 NYCRR 215.1) [Added March 2010].
- *CARB* - the California State Air Resources Board as defined in California's Health and Safety Code, section 39003 (1999) (see Table 1, section 200.9 of this Title) (6 NYCRR 218-1.2) [Added March 2003].
- *Carbon Adsorber* - an air cleaning device that consists of an inlet for exhaust gases from a dry cleaning machine; activated carbon in the form of a fixed bed, cartridge, or canister, as an adsorbent; an outlet for exhaust gases; and a system to regenerate, or reclaim saturated adsorbent (6 NYCRR 232.2).
- *Carbon Monoxide Control Area (Control Area)*(6 NYCRR 225-3.2) [Added March 2003]:
  1. the Consolidated Metropolitan Statistical Area (CMSA) in which a carbon monoxide nonattainment area is located or
  2. if the area is not located in a CMSA, the Metropolitan Statistical Area (MSA) in which the area is located; or
  3. if an area which was designated as nonattainment is redesignated as attainment for carbon monoxide, that CMSA or MSA as long as is necessary to maintain such standard in that area. The following shall be considered to be carbon monoxide control areas:
    - a. New York City Consolidated Metropolitan Statistical Area (New York City CMSA). This area consists of the counties of Bronx, Kings, Queens, New York, Richmond, Orange, Rockland, Putnam, Westchester, Nassau and Suffolk.
    - b. Syracuse Metropolitan Statistical Area (Syracuse MSA). This area consists of the counties of Onondaga, Oswego and Madison.
- *Cartridge Filter* - a replaceable cartridge filter that contains one of the following as the filter medium: paper, activated carbon, or paper and activated carbon. A cartridge filter contains no diatomaceous earth or activated clay. Cartridge filters include, but are not limited to: standard filters, split filters, "jumbo" filters, and all carbon polishing filters (6 NYCRR 232.2).

- *Certification* - a finding by the California Air Resources Board that a motor vehicle, motor vehicle engine, or air contaminant emission control system has satisfied the criteria adopted by CARB for the control of specified air contaminants from motor vehicles (6 NYCRR 218-1.2) [Added March 2003].
- *Certified Device* - an air contaminant emission control system for which a certification has been issued by CARB or the Department (6 NYCRR 218-1.2) [Added March 2003].
- *Chemical Waste* - liquid or semiliquid waste other than waste oil, including but not limited to, spent solvents, tars, paints, resins, and wastes and sludges from any process (6 NYCRR 225-2.2).
- *Clear Brushing Lacquers* - Clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, which are intended exclusively for application by brush and which are labeled as specified in section 205.4(e) of this Part (6 NYCRR 205.2) [Added March 2006].
- *Clear Wood Coatings* - Clear and semi-transparent coatings, including lacquers and varnishes applied to wood substrates to provide a transparent or translucent solid film (6 NYCRR 205.2) [Added March 2006].
- *Closed-loop Machine* - dry cleaning equipment in which washing, extraction, and drying are all performed in the same single unit (also known as a dry-to-dry unit) and which recirculates perc-laden vapor through a primary control system (e.g. refrigerated condenser) with no exhaust to the atmosphere during the drying cycle. A closed-loop machine may allow for venting to the ambient air through a local exhaust ventilation system, such as a door fan, after the drying cycle is complete and only while the machine door is open (6 NYCRR 232.2).
- *Coating* - A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains (6 NYCRR 205.2) [Added March 2006].
- *Colorant* - A concentrated pigment dispersion in water, solvent, and/or binder that is added to an architectural coating after packaging in sale units to produce the desired color (6 NYCRR 205.2) [Added March 2006].
- *Concrete Curing Compound* - A coating labeled and formulated for application to freshly poured concrete to retard the evaporation of water (6 NYCRR 205.2) [Added March 2006].
- *Concrete Surface Retarders* - A mixture of retarding ingredients such as extender pigments, primary pigments, resin, and solvent that interact chemically with the cement to prevent hardening on the surface where the retarder is applied, allowing the retarded mix of cement and sand at the surface to be washed away to create an exposed aggregate finish (6 NYCRR 205.2) [Added March 2006].
- *Construction* - the initiation of physical on-site construction activities that are of a permanent nature excluding site clearing and excavation. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures (6 NYCRR 201-2.1).
- *Co-located* - sharing a common wall, floor, or ceiling with a residence or business (6 NYCRR 232.2).
- *Colorimetric Detector Tube* - a glass tube (sealed prior to use), containing material impregnated with a chemical that is sensitive to perc and is designed to measure the concentration of perc in air (6 NYCRR 232.2).
- *Combustion Installation* - an installation, consisting of a one or more furnace, device, engine or turbine in which fossil fuel and/or wood is burned with air or oxygen and the air contaminant emissions include only those products resulting from (6 NYCRR 200.1) [Revised January 2000]:
  1. combustion of the fuel;
  2. additives or impurities in the fuel; and

3. material introduced for the purpose of altering air contaminant emissions.

- *Commissioner* - Commissioner of Environmental Conservation of the State of New York (6 NYCRR 200.1).
- *Condenser* - an air cleaning device that removes condensable vapors by a reduction in the temperature of the exhaust gases or, in the case of a surface condenser, by contact of the exhaust gases with structures that are cooled by a circulating cooling fluid (6 NYCRR 232.2).
- *Cool-down* - the portion of the drying cycle that begins when the heating mechanism deactivates and the refrigerated condenser continues to reduce the temperature of the air recirculating through the drum to reduce the concentration of perc in the drum (6 NYCRR 232.2).
- *Coating Line* - the application of one or more surface coatings, using one or more applicators, together with any associated drying or curing areas. A single coating line ends after drying or curing and before other surface coatings are applied. For any web coating line this term means an entire coating application system, including any associated drying ovens or areas located between an unwind station and rewind station, that is used to apply surface coatings onto a continuous strip or web. It is not necessary to have an oven or flash area in order to be included in this definition (6 NYCRR 228.2).
- *Coating System* - a series of surface coatings applied sequentially at the same coating line (6 NYCRR 228.2) [Revised March 2004].
- *Cold Cleaning Degreasing* - batch process of solvent metal cleaning, with liquid solvent, by spraying, brushing, flushing or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition (6 NYCRR 226.1) [Added March 2004].
- *Combined Cycle Combustion Turbine* - any combustion turbine that recovers heat from the exhaust gases to heat water or generate steam (6 NYCRR 227-2.2).
- *Combustion Installation* - an installation, consisting of one or more furnace, device, engine, or turbine in which fossil fuel and/or wood is burned with air or oxygen and the air contaminant emissions include only those products resulting from:
  1. combustion of the fuel
  2. additives or impurities in the fuel
  3. material introduced for the purpose of altering air contaminant emissions. A combustion installation may consist of:
    - a. a single furnace exclusively connected to an air cleaning device and/or stack
    - b. two or more furnaces connected to a common air cleaning device and/or stack (6 NYCRR 200.1).
- *Combustion Turbine* - a stationary combustion engine that operates with a rotary motion (6 NYCRR 227-2.2).
- *Commence Construction or Commence Modification* - to initiate a program of onsite construction, including but not limited to site clearance, grading, dredging, land filling or entering into a contract for paving or installation of foundations for the fabrication, erection or installation of any component of an indirect source area or in preparation for the fabrication, erection or installation of the component of an indirect source. Construction or modification of a highway or road does not include construction or modification of curb cuts, driveways or other entrance ways to public highways from private property which are not subject to the provisions of 6 NYCRR Part 203 (6 NYCRR 203.2).
- *Commercial Waste* - solid waste generated by stores, offices, institutions, restaurants, warehouses, and nonmanufacturing activities at industrial facilities (6 NYCRR 219.1).
- *Commissioner* - Commissioner of Environmental Conservation of the State of New York (6 NYCRR 200.1).

- *Confined Process* - any process whose emissions are contained or captured in a hood and then conveyed through a duct, vent or stack prior to discharge to the outer atmosphere (6 NYCRR 200.1).
- *Conforming Gasoline* - any gasoline that conforms to the requirements of sections 225-3.3 and 225-3.4 of this Subpart (6 NYCRR 225-3.2).
- *Consumer* - any person who purchases or otherwise acquires a new portable fuel container or spout or both portable fuel container and spout for personal, family, household, or institutional use. Persons acquiring a portable fuel container or spout or both portable fuel container and spout for resale are not "consumers" for that product (6 NYCRR 239-2) [Added March 2003].
- *Container* - any portable device in which a material is stored, transported, or otherwise handled (6 NYCRR 228.2).
- *Continuous Emissions Monitoring System (CEMS) Certification Protocol* - emission testing procedures which demonstrate compliance with requirements for system accuracy and precision (6 NYCRR 227-2.2) [Revised March 2004].
- *Conveyorized Degreasing* - continuous process of solvent metal cleaning by operating with either cold or vaporized solvents (6 NYCRR 226.1) [Added March 2004].
- *Cutback Asphalt* - any asphalt that has been liquefied by blending with petroleum solvents (Diluents) or, in the case of some slow cure asphalts (road oils), which have been produced directly from the distillation of petroleum (6 NYCRR 211.1).
- *Day* - A 24-h period beginning at midnight (6 NYCRR 200.1).
- *Degreaser* - any solvent metal cleaning machine used to perform cold cleaning degreasing, remote reservoir degreasing, conveyorized degreasing, or open-top vapor degreasing (6 NYCRR 226.1) [Added March 2004].
- *Department* - The New York State Department of Environmental Conservation (6 NYCRR 200.1).
- *Desorption* - regeneration or stripping of an activated carbon bed, or any other type of vapor adsorber by removal of the adsorbed solvent using hot air, steam, or other means (6 NYCRR 232.2).
- *Diesel Engine* - an internal combustion engine in which air is compressed to a temperature capable of igniting fuel injected into the cylinders where combustion occurs (6 NYCRR 200.1).
- *Dioxin Equivalent* - any combination or mix of polychlorinated dibenzo-para-dioxins and polychlorinated dibenzo furans containing from four to eight chlorine atoms which are expressed as 2, 3, 7, 8 tetrachlorinated dibenzo- para-dioxin equivalents using the toxic equivalency factors listed below. Standard conditions upon which these data are referenced are an absolute pressure of 760 mm mercury and 20 °C at 7 percent oxygen (6 NYCRR 219.1):

| Compound  | Factor |
|---|--------|
| monochlorinated dibenzo-para-dioxins (all)      | 0      |
| trichlorinated dibenzo-para-dioxins (all)       | 0      |
| dichlorinated dibenzo-para-dioxins (all)        | 0      |
| 2, 3, 7, 8 tetrachlorinated dibenzo-para-dioxin | 1      |
| other tetrachlorinated dibenzo-para-dioxins     | 0.01   |
| 2, 3, 7, 8 pentachlorinated dibenzo-para-dioxin | 1      |
| other pentachlorinated dibenzo-para-dioxins     | 0.01   |
| 2, 3, 7, 8 hexachlorinated dibenzo-para-dioxin  | 0.03   |
| other hexachlorinated dibenzo-para-dioxins      | 0.0003 |
| 2, 3, 7, 8 heptachlorinated dibenzo-para-dioxin | 0.001  |

|   |         |
|---|---------|
| other heptachlorinated dibenzo-para-dioxins | 0.00001 |
| octachlorinated dibenzo-para-dioxins        | 0       |
| 2, 3, 7, 8 tetrachlorinated dibenzo furan   | 0.33    |
| other tetrachlorinated dibenzo furans       | 0.003   |
| 2, 3, 7, 8 pentachlorinated dibenzo furan   | 0.33    |
| other pentachlorinated dibenzo furans       | 0.003   |
| 2, 3, 7, 8 hexachlorinated dibenzo furan    | 0.01    |
| other hexachlorinated dibenzo furans        | 0.0001  |
| 2, 3, 7, 8 heptachlorinated dibenzo furan   | 0.001   |
| other heptachlorinated dibenzo furans       | 0.00001 |
| octachlorinated dibenzo furans              | 0       |

- *Dip Tank* - a separate tank that contains perc and is used for purposes other than dry cleaning (e.g., waterproofing) (6 NYCRR 232.2).
- *Distillate Oil* - a fuel oil consisting of distilled fractions and having a kinematic viscosity of 5.8 centistokes or less at 100 °F. This includes ASTM grade numbers 1 and 2 fuel oil, ASTM grade numbers 1-D and 2-D diesel fuel oil and proposed ASTM grade numbers 1-GT and 2-GT gas turbine fuel oil (6 NYCRR 200.1).
- *Distributor* - any person who transports or stores or causes the transportation or storage of gasoline at any point between a refinery or importer's facility and a retail outlet or wholesale purchaser-consumer's facility (6 NYCRR 225-3.2).
- *Distributor* - any person to whom a portable fuel container or spout or both portable fuel container and spout is sold or supplied for the purpose of resale or distribution in commerce. This term does not include manufacturers, retailers, and consumers (6 NYCRR 239-2) [Added March 2003].
- *Diverter Valve* - a flow control device that prevents room air from passing through a refrigerated condenser when the door of a dry cleaning machine is open (6 NYCRR 232.2).
- *Door Fan* - a local exhaust ventilation system designed to provide for a minimum 100 fpm inward air velocity into the effective door open area of a dry cleaning machine whenever the door is opened, and where the perc emissions are controlled by a carbon adsorber or equivalent control prior to venting to the outer air (6 NYCRR 232.2).
- *Drum* - the rotating cylinder or wheel of the dry cleaning machine that holds the articles being cleaned (6 NYCRR 232.2).
- *Dry Cleaning* - the process used to remove soil, greases, paints and other unwanted substances from articles with the use of perc (6 NYCRR 232.2).
- *Dry Cleaning Control System* - equipment (e.g., carbon adsorber, refrigerated condenser, azeotropic unit, etc.) or an air cleaning device used to reduce the amount of air pollutant(s) in an air stream prior to discharge to the atmosphere (6 NYCRR 232.2).
- *Dry Cleaning Equipment* - any machine, device, or apparatus used to dry clean articles (6 NYCRR 232.2).
- *Dry Cleaning Facility* - a facility with one or more dry cleaning systems (6 NYCRR 232.2).
- *Dry Cleaning System* - all of the following equipment, devices, or apparatus associated with the perc dry cleaning operations, including, but not limited to: dry cleaning equipment; filter or purification systems; waste holding, treatment, or disposal systems; perc supply systems; dip tanks; pumps; gaskets; piping, ducting, fittings, valves, or flanges that convey perc-contaminated air; and dry cleaning control systems (6 NYCRR 232.2).

- *Drying Cabinet* - a housing in which materials that have been previously dry cleaned in perc are dried instead of being dried by tumbling in a dry cleaning machine (6 NYCRR 232.2).
- *Drying Cycle* - the operation used to actively remove the perc remaining in the materials after washing and extraction. For closed-loop machines, the heated portion of the cycle is followed by cool-down and may be extended beyond cool-down by the activation of a control system. The drying cycle begins when heating coils are activated and ends when the machine ceases rotation of the drum (6 NYCRR 232.2).
- *Dry Fog Coating* - A coating labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity (6 NYCRR 205.2) [Added March 2006].
- *Drying Sensor* - a device that senses when articles being cleaned are relatively dry and automatically controls the drying cycle. Drying sensors include but are not limited to: infrared analyzers, float switches, and resistance probes. The device detects the concentration of synthetic solvents in the drying air or that the liquid solvent recovery rate is at a minimal rate. The drying sensor extends the drying cycle for a minimum time beyond the activation point to ensure dry articles (6 NYCRR 232.2).
- *Dry-to-Dry Machine* - a one-machine dry cleaning operation in which drying and washing are performed in the same machine (6 NYCRR 232.2).
- *Dry-to-Dry Vented Machine* - dry cleaning equipment in which washing, extraction, and drying are all performed in the same single unit and in which fresh air is introduced into the drum in the last step of the drying cycle and exhausted to the outdoor atmosphere, either directly or through a control device (second generation equipment) (6 NYCRR 232.2).
- *Emergency* - any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner and/or operator of a facility, including acts of God, which situation requires immediate corrective action to restore normal operation and which causes the emission source to exceed a technology-based requirement under the permit or state-established emission limitations, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error (6 NYCRR 201-2.1).
- *Emergency Power Generating Stationary Internal Combustion Engine* - a stationary internal combustion engine that operates as a mechanical or electrical power source only when the usual supply of power is unavailable, and operates for no more than 500 hours per year. The 500 hours of annual operation for the engine include operation during emergency situations, routine maintenance, and routine exercising ('e.g.,' test firing the engine for one hour a week to ensure reliability). Stationary internal combustion engines used for peak shaving generation are not emergency power generating stationary internal combustion engines (6 NYCRR 227-2.2) [Added March 2004].
- *Emergency Vehicle* - a vehicle as defined in section 165 of the California Vehicle Code (see Table 1, section 200.9 of this Title) (6 NYCRR 218-1.2) [Added March 2003].
- *Emission* - the release of any air contaminant into the outdoor atmosphere (6 NYCRR 200.1).
- *Emission Cap* - a federally enforceable limit, term, or condition imposed by a permit, or through regulation, that restricts emissions for the purpose of avoiding an applicable requirement to which the stationary source would otherwise be subject, to establish enforceable emission reductions or to avoid the requirement to obtain a Title V facility permit. An emission cap can be facility-wide or limited to one or more emission units (6 NYCRR 201-2.1).
- *Emission Point* - any conduit, chimney, duct, vent, flue, stack, or opening of any kind through which air contaminants are emitted to the outdoor atmosphere (6 NYCRR 200.1).

- *Emission Rate Potential* - the maximum rate at which a specified air contaminant from an emission source would be emitted to the outdoor atmosphere in the absence of any control equipment. The emission rate potential of a specified air contaminant from an emission source is calculated by dividing the weight of such contaminant (expressed in pounds) that would be emitted to the outdoor atmosphere during maximum emission conditions in the absence of any control equipment, by the duration (expressed in hours) of such emissions. When an air contaminant is emitted for a period equal to or less than 1 h, the emission rate potential is the weight of the contaminant emitted in the absence of any control equipment, divided by 1 h, except that for any toxic air contaminant specified by the Commissioner, the duration of emissions used in calculating the emission rate potential may be less than 1 h. The maximum emission rate used for calculating the emission rate potential is not the emission rate during catastrophic or malfunction conditions (6 NYCRR 200.1).
- *Emission Test* - any method of collecting stack samples or samples of emissions from an air contamination source and analyzing such samples for air contaminants (6 NYCRR 200.1).
- *Environmental Rating* - an assigned rating indicated by the letter A, B, C, or D, that considers the potential environment effects of an air contamination source on its surroundings (6 NYCRR 200.1; 212.1).
- *Equivalent Closed-Loop Vapor Recovery System* - a device or combination of devices that achieves, in practice, a perc recovery performance equal to or exceeding that of refrigerated condensers (6 NYCRR 232.2).
- *Equivalent Control* - the use of alternate operational and/or equipment controls for the reduction of gasoline vapor emissions, that have been approved by the commissioner, such that the aggregate emissions of gasoline vapor from the facility do not exceed those from the application of defined reasonably available control technology (6 NYCRR 230.1).
- *Equivalent Opacity* - the opacity measured by methods acceptable to the Commissioner when a specific emission source is emitting air contaminants at, or less than, the mass emission standards, as corroborated by emission tests acceptable to the Commissioner (6 NYCRR 200.1).
- *Excluded VOC* - any of the compounds expressly excluded from the definition of volatile organic compound in section 200.1 of this title (6 NYCRR 228.2).
- *Exempt VOCs* - the organic compounds listed here do not constitute VOCs for purposes of determining permitting applicability, demonstrating compliance with a VOC emission limit or VOC content requirement, or calculating Operating Permit Program Fees. These compounds are considered to be VOCs for purposes of all VOC recordkeeping and emissions reporting requirements and are considered regulated air contaminants for the purposes of Subpart 202-2 Emission Reporting requirements (6 NYCRR 200.1) [Added March 2007]:
  - (1) tertiary butyl acetate.
- *Exhaust and/or Ventilation System* - any system that removes air contaminants from a process and transports them from their point of generation to the outdoor atmosphere (6 NYCRR 200.1).
- *Existing Facility* - any facility at which dry cleaning equipment was installed or operated prior to the effective date of this Part (6 NYCRR 232.2).
- *Facility* - all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person, or persons under common control (6 NYCRR 200.1).
- *Faux Finishing Coating* - A coating labeled and formulated as a stain or a glaze to create artistic effects including, but not limited to, dirt, old age, smoke damage, and simulated marble and wood grain (6 NYCRR 205.2) [Added March 2006].
- *Federally Enforceable* - Federally enforceable means all limitations and conditions that are enforceable by the Department and the Administrator and citizens under the Act. Examples of federally enforceable limitations and conditions include but are not limited to (6 NYCRR 200.1):



1. emission standards, alternative emissions standards, alternative emission limitations, and equivalent emission limitations established pursuant to section 112 of the Act as amended in 1990;
  2. new source performance standards established pursuant to section 111 of the Act, and emission standards established pursuant to section 112 of the Act before it was amended in 1990;
  3. all terms and conditions in a Title V permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable;
  4. all limitations and requirements under the applicable implementation plan (SIP) for the state of New York;
  5. limitations and conditions that are part of a federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by the EPA in accordance with 40 CFR 51;
  6. limitations and conditions in a permit issued under this Chapter that are designed to limit a facility's potential to emit for the purpose of avoiding an applicable requirement to which the facility would otherwise be subject.
- *Filter Muck* - the residue from a filter using loose diatomaceous earth, which must be replaced periodically (6 NYCRR 232.2).
  - *Final Distribution Facility* - the stationary facility of a distributor from which gasoline is supplied to a retail outlet or wholesale purchaser-consumer's facility, or the portable container used to transport gasoline if an oxygenate has or will be added to such portable container prior to delivery to a retail outlet or wholesale purchaser-consumer's facility (6 NYCRR 225-3.2).
  - *Fire-Resistive Coating* - An opaque coating labeled and formulated to protect the structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials, that has been fire tested and rated by a testing agency and approved by building code officials for use in bringing assemblies of structural materials into compliance with federal, state, and local building code requirements. The fire-resistive coating and the testing agency must be approved by building code officials. The fire-resistive coating shall be tested in accordance with American Society for Testing and Materials (ASTM) Designation E 119-00a (see Table 1, section 200.9 of this Title) (6 NYCRR 205.2) [Added March 2006].
  - *Fire-Retardant Coating* - A coating labeled and formulated to retard ignition and flame spread that has been tested and rated by a testing agency approved by building code officials for use in bringing building and construction materials into compliance with Federal, State, and local building code requirements. The fire-retardant coating and the testing agency must be approved by building code officials. The fire-retardant coating shall be tested in accordance with ASTM Designation E 84-01 (see Table 1, section 200.9 of this Title) (6 NYCRR 205.2) [Added March 2006].
  - *First Generation Equipment* - transfer machines where cleaning and drying (reclaiming) take place in separate machines with the manual transfer of articles from one machine to another (6 NYCRR 232.2).
  - *Flat Coating* - A coating that is not defined under any other definition in this rule and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to ASTM Designation D 523-89 (1999) (see Table 1, section 200.9 of this Title) (6 NYCRR 205.2) [Added March 2006].
  - *Flexographic Printing Process* - application of words, designs, and pictures to a substrate by means of a printing technique in which the image to be applied is raised above the nonimage area and the image carrier is made of a rubber or other elastomeric materials (6 NYCRR 234.1).
  - *Floor Coating* - An opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, and other horizontal surfaces which may be subjected to foot traffic (6 NYCRR 205.2) [Added March 2006].
  - *Flow Coating* - A coating labeled and formulated exclusively for use to maintain the protective coating systems present on utility transformer units (6 NYCRR 205.2) [Added March 2006].

- *Fossil Fuel Burning Equipment* - any furnace, steam, hot-air or hot-water generating equipment or any other device, exclusive of process equipment in which the fuel burned is coal, oil, gas, or other fossil fuels (6 NYCRR 200.1).
- *Form-Release Compound* - A coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal or some material other than concrete (6 NYCRR 205.2) [Added March 2006].
- *Fourth Generation Equipment* - a primary closed-loop refrigerated dry cleaning machine that has a "secondary control system" (e.g., closed-loop refrigerated condenser with a drying sensor and an integral carbon adsorber) (6 NYCRR 232.2).
- *Freeboard Height* - Distance from the top of the vapor zone to the top of the degreaser tank. On cold cleaners, it is the distance from liquid level to lip of tank (6 NYCRR 226.1) [Added March 2004].
- *Freeboard Ratio* - Freeboard height divided by the interior width of the degreaser tank (6 NYCRR 226.1) [Added March 2004].
- *Fuel* - solid, liquid, or gaseous combustible material (6 NYCRR 200.1).
- *Fuel* - all fuels subject to any provision of 6 NYCRR 225-3 (ie. gasoline) (6 NYCRR 239-2) [Added March 2003].
- *Fugitive Emissions* - emissions of air contaminants that could not reasonably pass through a stack, vent, chimney or other functionally equivalent opening (6 NYCRR 200.1).
- *Furnace* - any device (excluding internal combustion engines and gas turbines) that combusts fossil fuel and/or wood for any purpose and whose emissions to the outside atmosphere only include the products of combustion from fossil fuels and/or wood (6 NYCRR 201-2.1).
- *Garbage* - the animal and vegetable waste resulting from the handling, preparation, cooking, and serving of food (6 NYCRR 200.1).
- *Gasoline* - a volatile liquid mixture containing hydrocarbons or a blend of this mixture with one or more oxygen-containing, ashless organic compounds, such as alcohols or ethers, that is suitable for use in motor vehicles with spark-ignition, internal combustion engines and which is commonly or commercially known or sold as gasoline (6 NYCRR 225-3.2).
- *General Exhaust Ventilation System* - a mechanical exhaust ventilation system consisting of fresh air makeup inlets and one or more exhaust fans in a dry cleaning facility. This type of system would commonly be used to exhaust a dry cleaning workroom or a room enclosure (6 NYCRR 232.2).
- *Graphic Arts* - packaging rotogravure, publication rotogravure, flexographic, offset lithographic, and screen printing processes (6 NYCRR 234.1).
- *Graphic Arts Coating or Sign Paint* - A coating labeled and formulated for hand-application using brush or roller techniques to indoor and outdoor signs (excluding structural components) and murals including letter enamels, poster colors, copy blockers, and bulletin enamels (6 NYCRR 205.2) [Added March 2006].
- *Heat Input* - the heat released (exothermic heat of chemical reaction) due to the combustion of fuel. It includes only the weight rate (e.g., pounds/hour) of the fuel fired multiplied by the caloric value of the fuel (6 NYCRR 200.1).
- *Heavy-Duty Engine* - an engine which is used to propel a heavy-duty vehicle (6 NYCRR 218-1.2) [Added March 2003].

- *Heavy-Duty Vehicle* - any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars (6 NYCRR 218-1.2) [Added March 2003].
- *High Temperature Coating* - A high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F) (6 NYCRR 205.2) [Added March 2006].
- *Hospital* - any facility which has an organized medical staff, maintains at least six inpatient beds, and where the primary function of the institution is to provide diagnostic and therapeutic patient services and continuous nursing care primarily to human inpatients who are not related and who stay on average in excess of 24 h per admission. This definition does not include facilities maintained for the sole purpose of providing nursing or convalescent care to human patients who generally are not acutely ill but require continuing medical supervision (6 NYCRR 219-1.1) [Added January 1999].
- *Hospital/Medical/Infectious Waste Incinerator* or *HMIWI* or *HMIWI Unit* - any device that combusts any amount of hospital waste and/or medical/infectious waste (6 NYCRR 219-1.1) [Added January 1999].
- *Hospital/Medical/Infectious Waste Incinerator Operator* or *HMIWI Operator* - any person who operates, controls or supervises the day-to-day operation of an HMIWI (6 NYCRR 219-1.1) [Added January 1999].
- *Hospital Waste* - discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation (6 NYCRR 219-1.1) [Added January 1999].
- *Impacted Immersion Coating* - A high performance maintenance coating formulated and recommended for application to steel structures subject to immersion in turbulent, debris-laden water. These coatings are specifically resistant to high-energy impact damage by floating ice or debris (6 NYCRR 205.2) [Added March 2006].
- *Incinerator* -
  1. Any structure or furnace in which combustion takes place and refuse is used as a fuel, alone or in conjunction with fossil fuel (6 NYCRR 200.1).
  2. Any structure or furnace in which combustion takes place and type 0, 1, 2, 3, or 4 refuse is used as fuel, alone or in conjunction with fossil fuel (6 NYCRR 219-1.1) [Added January 1999].
- *Inboard Engine* - a 4-stroke spark ignition marine engine not used in a personal watercraft that is designed such that the propeller shaft penetrates the hull of the marine watercraft while the engine and the remainder of the drive unit is internal to the hull of the marine watercraft (NYCRR 210-1.2) [Added March 2004].
- *Indirect Source of Air Contamination* or *Indirect Source* - a facility, structure, or installation the construction or operation of which results or may result directly or indirectly in associated vehicular movements which contribute to ambient concentrations of any air contaminant for which there is an ambient air quality standard, including:
  1. highways and roads on which the predicted annual average of daily traffic volume within 10 yr of completion of construction may exceed 20,000 vehicles, or where the modification of any existing section of road or highway which may increase the annual average of daily traffic volume within 10 yr of completion of modification by more than 10,000 vehicles
  2. parking areas (6 NYCRR 203.2).
- *Industrial Maintenance Coating* - A high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to substrates exposed to one or more of the following extreme environmental conditions listed in paragraphs (1)-(5) of this subdivision and labeled as specified in section 205.4(d) of this Part (6 NYCRR 205.2) [Added March 2006]:

1. immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposures of interior surfaces to moisture condensation;
  2. acute or chronic exposure to corrosive, caustic or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;
  3. repeated exposure to temperatures above 121°C (250°F);
  4. repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents; or
  5. exterior exposure of metal structures and structural components.
- *Iron and/or Steel Processes* - processes commonly associated with or necessary to production of iron and steel, excluding ferro-alloys but including, but not limited to, the following:
    1. materials handling systems, including but not limited to systems for handling iron ore, ore pallets, coal, limestone, fluxes, scrap steel sinter, coke, steel alloying ingredients, slag, and dust
    2. blast furnaces for making iron
    3. sintering processes such as agglomeration including sintering and handling of agglomerated materials but excluding iron ore beneficiating processes and processes occurring prior to iron ore agglomeration, such as washing, screening, crushing, blending and materials handling
    4. basic oxygen furnaces, open hearths, and electric furnaces
    5. iron and/or steel furnaces, except furnaces in jobbing foundries
    6. molten material transfer and processing operations, including but not limited to, teeming, tapping, reladling, and casting
    7. continuous casting operations
    8. scarfing and other surface defect removal operations, except those in jobbing foundries
    9. scrap preparation, including scrap melting and burning operations
    10. molten metal desulfurization operations
    11. raw material drying systems
    12. process furnaces, including soaking pits, annealing furnaces, reheating furnaces, and other process furnaces using direct heat transfer (6 NYCRR 200.1).
  - *Lacquer* - A clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film (6 NYCRR 205.2) [Added March 2006].
  - *Large Boiler* - a boiler with maximum heat input capacity greater than 100 million British thermal units (MBtu)/h, and equal to or less than 250 MBtu/h (6 NYCRR 227-2.2) [Revised March 2004].
  - *Lean Burn Internal Combustion Engine* - any stationary internal combustion engine that is operated so that the amount of oxygen in the engine exhaust is 1.0 percent or more, by volume on a dry basis (6 NYCRR 227-2.2) [Revised March 2004].
  - *Light-Duty Truck (LDT)* - any affected motor vehicle:
    1. that is rated in the weight range greater than 6,000 lbs. GVWR but less than or equal to 8,500 lbs. GVWR and has a basic vehicle frontal area of 45 square ft or less; and
    2. that meets any of the following criteria:
      - a. designed primarily for purposes of transportation of property or is a derivation of such a vehicle.
      - b. designed primarily for transportation of persons and has a capacity of more than twelve persons.
      - c. equipped with special features enabling off-street or off-highway operation and use (6 NYCRR 217-1.1) [Added January 1998].
  - *Light-Duty Truck* - light-duty truck as defined in California Code of Regulations, title 13, section 1900 (see Table 1, section 200.9 of this title) (6 NYCRR 218-1.2) [Added March 2003; Revised March 2006].
  - *Light-Duty Vehicle (LDV)* - a passenger car or passenger car capable of seating 12 or fewer passengers (6 NYCRR 217-1.1) [Added January 1998; Revised March 2003].

- *Liquid Leak* - a leak of liquid containing perc of more than one drop every three minutes (6 NYCRR 232.2).
- *Local Exhaust Ventilation System* - a mechanical exhaust ventilation system connected directly to a dry cleaning machine or other related dry cleaning equipment. For example, the exhaust system on a door fan for a third generation machine constitutes a local exhaust ventilation system (6 NYCRR 232.2).
- *Low NOx Burner* - a burner designed to reduce flame turbulence by the mixing of fuel and air and by establishing fuel-rich zones for initial combustion, thereby reducing the formation of NOx. (6 NYCRR 227-2.2) [Added March 2004].
- *Lowest Achievable Emission Rate (LAER)* - the most stringent emission limitation achieved in practice, or which can reasonably be expected to occur in practice for a category of emission sources taking into consideration each air contaminant which must be controlled. In no event shall the application of this term permit a proposed new source or modification to emit any air contaminant in excess of the amount permitted under any applicable emission standard established under 6 NYCRR or 40 CFR (6 NYCRR 200.1).
- *Lower Orange County Metropolitan Area* - the area including the towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, and Woodbury (6 NYCRR 200.1 and 212.1).
- *Low Solids Coating* - A coating containing 0.12 kilogram or less of solids per liter (one pound or less of solids per gallon) of coating material (6 NYCRR 205.2) [Added March 2006].
- *L.P. Gas* - a petroleum hydrocarbon, such as propane, butane or isobutane which is normally a gas but which can be compressed and condensed to a liquid (6 NYCRR 200.1).
- *Magnesite Cement Coating* - A coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water (6 NYCRR 205.2) [Added March 2006].
- *Major Source* - a dry cleaning facility that emits or has the potential to emit more than 9.1 megagrams per yr (10 tons per year) of perc to the atmosphere. In lieu of measuring a facility's potential to emit perc or determining a facility's potential to emit perc, a dry cleaning facility is a major source if: (1) it includes only dry-to-dry machine(s) and has a total yearly perc consumption greater than 8,000 liters (2,100 gallons) as determined according to section 232.12(b) of this Part; or, (2) it includes only transfer machine system(s) or both dry-to-dry machine(s) and transfer machine system(s) and has a total yearly perc consumption greater than 6,800 liters (1,800 gallons) as determined according to section 232.12(b) of this Part (6 NYCRR 232.2).
- *Major Stationary Source or Major Source* - any stationary source or any group of stationary sources, any source or any group of sources, or any facility or any group of facilities, that are located on one or more contiguous or adjacent properties and are under common control, belonging to a single major industrial grouping and that are described in subparagraph (i), (ii), (iii), (iv), or (v) of this paragraph. For the purposes of this definition, a stationary source, source, or facility or group of stationary sources, sources, or facilities shall be considered part of a single industrial grouping if all of the air pollutant or air contaminant emitting activities at such stationary source, source, or facility, or any group of stationary sources, sources, or facilities on contiguous or adjacent properties belong to the same major group (i.e., all have the same two-digit code), as described in the Standard Industrial Classification Manual, 1987. Stand alone or common wall residential housing units including compatible commercial activities, which are not regulated by other applicable requirements, where the potential to emit for individual associated combustion or emission sources are below major stationary source, major source, or major facility applicability thresholds (notwithstanding that the sum of these individual combustion or emission sources could exceed major stationary sources, major source, or major facility applicability thresholds) shall not be considered a major stationary source, major source, or major facility. (6 NYCRR 201-2.1) [Revised March 2009]:
  1. Except as otherwise expressly provided in this paragraph, a stationary source, source, or facility that directly emits or has the potential to emit, 100 tpy or more of any air pollutant or air contaminant regulated under the Act (including any major source or facility which emits only fugitive emissions, of any such pollutant, as determined through regulation by the administrator). With the exception of

emissions of hazardous air pollutants, fugitive emissions shall not be considered in determining whether a facility is major unless it belongs to one of the source categories identified in subparagraph (iii) of this paragraph.

2. For hazardous air pollutants other than radionuclides, a stationary source, source, or facility that emits or has the potential to emit, in the aggregate, 10 tons per year (tpy) or more of any hazardous air pollutant as defined in Part 200 of this Title (including any fugitive emissions of such pollutant), 25 tpy or more of any combination of such hazardous air pollutants (including any fugitive emissions of such pollutants), or such lesser quantity as the administrator may establish by rule. The administrator shall specify the meaning of radionuclides for major stationary sources, major sources, or major facilities by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or oil and gas production well (with its associated equipment) and the emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major stationary sources, major sources, or major facilities.
3. stationary source, source, or facility that belongs to one of the following source categories and directly emits or has the potential to emit, 100 tpy or more of any air pollutant or air contaminant regulated under the Act (including the fugitive emissions of any such pollutant or contaminant):
  - a. coal cleaning plants (with thermal dryers)
  - b. kraft pulp mills
  - c. portland cement plants
  - d. primary zinc smelters
  - e. iron and steel mills
  - f. primary aluminum ore reduction plants
  - g. primary copper smelters
  - h. municipal incinerators capable of charging more than 50 tons of refuse per day
  - i. hydrofluoric, sulfuric, or nitric acid plants
  - j. petroleum refineries
  - k. lime plants
  - l. phosphate rock processing plants
  - m. coke oven batteries
  - n. sulfur recovery plants
  - o. carbon black plants (furnace process)
  - p. primary lead smelters
  - q. fuel conversion plants
  - r. sintering plants
  - s. secondary metal production plants
  - t. chemical process plants
  - u. fossil-fuel boilers (or combination thereof) totaling more than 250 million British Thermal Units per h heat input
  - v. petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels
  - w. taconite ore processing plants
  - x. glass fiber processing plants
  - y. charcoal production plants
  - z. fossil-fuel-fired steam electric plants of more than 250 million British Thermal Units per h heat input
  - aa. all other source categories regulated by a standard under Sections 111, for which EPA has completed a rulemaking proceeding under 302(j) of the act or section 112 of the act, but only with respect to those air pollutants that have been regulated for that category as of the effective date of this Part
  - bb. municipal solid waste landfills.
4. A stationary source, source, or facility that is located in a nonattainment area or an attainment area of the state within the ozone transport region where the stationary source, source, or facility potential to emit equals or exceeds the emissions thresholds (in tpy) identified in clauses (a), (b), (c), (d), or (e) of this subparagraph (including fugitive emissions if the stationary source, source, or facility belongs to one of the source categories listed in subparagraph (iii) of this Paragraph):

- a. For areas classified as marginal or moderate ozone nonattainment, any stationary source, source, or facility with the potential to emit 100 tpy or more of oxides of nitrogen (NO<sub>x</sub>) or 50 tpy or more of volatile organic compounds (VOC)
  - b. For areas classified as severe ozone nonattainment, any stationary source, source, or facility with the potential to emit 25 tpy or more of NO<sub>x</sub> or VOC
  - c. For attainment areas of the state within the ozone transport region, any stationary source, source, or facility with the potential to emit 100 tpy or more of NO<sub>x</sub> or 50 tpy or more of VOC
  - d. For areas classified as moderate PM-10 nonattainment, any stationary source, source, or facility with the potential to emit 100 tpy or more of PM-10
  - e. For PM-2.5 nonattainment areas, any stationary source, source, or facility with the potential to emit 100 tpy or more of PM-2.5.
5. For purposes of determining the applicability of Part 231 with respect to Prevention of Significant Deterioration (PSD) requirements only, a stationary source, source, or facility located in an attainment area of the state where the stationary source, source, or facility potential to emit equals or exceeds 250 tons per year of any attainment contaminant regulated under the Act; or equals or exceeds 100 tons per year of any attainment contaminant regulated under the Act (including fugitive emissions) if the stationary source, source, or facility belongs to one of the source categories listed in subparagraph (iii) of this paragraph.
- *Malfunction* - any sudden and unavoidable failure of an air cleaning device or air contamination source to operate in compliance with all applicable Parts of this Title, and shall not include failures that are caused entirely or partially by poor maintenance, careless operation, or other preventable condition (6 NYCRR 201-2.1).
  - *Manufacturer* - any person who imports, manufactures, assembles, produces, packages, repackages, or relabels a portable fuel container or spout or both portable fuel container and spout (6 NYCRR 239-2) [Added March 2003].
  - *Mastic Texture Coating* - A coating labeled and formulated to cover holes and minor cracks and conceal surface irregularities, which is applied in a single coat of at least 10 mils (0.010 inch) dry film thickness (6 NYCRR 205.2) [Added March 2006].
  - *Maximum Operating Heat Input* - the maximum heat input in million British thermal units per h at which a stationary combustion installation is anticipated to be operated or at which it actually has been operated. This heat input will be the permissible operating limit as specified on a permit to construct or certificate to operate (6 NYCRR 200.1).
  - *Medical/Infectious Waste* - any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that is listed below (6 NYCRR 219-1.1) [Added January 1999]:
    1. Cultures and stocks of infectious agents and associated biologicals, including: cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.
    2. Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers.
    3. Human blood and blood products including:
      - a. Liquid waste human blood;
      - b. Products of blood;
      - c. Items saturated and/or dripping with human blood; or
      - d. Items that were saturated and/or dripping with human blood that are now caked with dried human blood; including serum, plasma, and other blood components, and their containers, which were used or intended for use in either patient care, testing and laboratory analysis or the development of pharmaceuticals. Intravenous bags are also included in this category.

4. Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides or cover slips.
5. Animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals or testing of pharmaceuticals.
6. Isolation wastes including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from certain highly communicable diseases, or isolated animals known to be infected with highly communicable diseases.
7. Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulations in part 373 of this Title; household waste, as defined in part 360 of this Title; ash from incineration of medical/infectious waste, once the incineration process has been completed; human corpses, remains, and anatomical parts that are intended for interment or cremation; and domestic sewage materials.

- *Medium-Duty Vehicle* - medium-duty vehicle as defined in California Code of Regulations, title 13, section 1900 (see Table 1, section 200.9 of this title (6 NYCRR 218-1.2) [Added March 2003; Revised March 2006].
- *Metallic Pigmented Coating* - A coating containing at least 48 grams of elemental metallic pigment per liter of coating as applied (0.4 pounds per gallon), when tested in accordance with South Coast Air Quality Management District Method 318-95 (see Table 1, section 200.9 of this Title) (6 NYCRR 205.2) [Added March 2006].
- *Mid-size Boiler* - a boiler with maximum heat input capacity greater than 50 MBtu/h and equal to or less than 100 MBtu/h (6 NYCRR 227-2.2) [Revised March 2004].
- *Military Tactical Vehicles and Equipment* - those vehicles defined by California Code of Regulations, Title 13, section 1905 (see Table 1, section 200.9 of this Title) (6 NYCRR 218-1.2) [Added March 2003].
- *Mixed-use Facility* - a facility that is co-located (6 NYCRR 232.2).
- *Modification* - any physical change, or change in the method of operation of an incinerator, stationary combustion installation or process which (6 NYCRR 200.1):
  1. increases the hourly emission rate, emission concentration or emission opacity of any air contaminant
  2. involves the installation or alteration of any air cleaning installation, air cleaning device or control equipment
  3. involves conversion of fuel used in any emission source to a fuel with a higher ash content than the fuel used prior to the change
  4. involves the alteration of any furnace or other physical changes to allow burning or refuse or refuse-derived fuel with fossil fuel
  5. results in the emission of any air pollutant not previously emitted or authorized under the permit.

(NOTE: Routine maintenance, repair, and replacement of original equipment or parts thereof are not considered physical changes. An increase or decrease in the hours of operation is not considered a change in the method of operation if the total emissions do not cause air pollution or contravention of any applicable ambient air quality standard, and the hours of operation are not restricted through a condition of a permit or certificate issued for the air contamination source. (NOTE: A physical change or a change in the method of operation does not include the use of an alternative fuel or raw material which:

  1. The facility or emission source was capable of accommodating before 6 Jan 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after 6 Jan 1975 pursuant to 40 CFR Part 52.21; or



2. The facility or emission source is approved to use under any permit issued under 40 CFR Part 52.21.)
- *Motor Vehicle* - a vehicle that can travel on land and which is propelled by means other than human or animal muscular power, except such vehicles which run only on tracks or rails (6 NYCRR 200.1).
  - *Muck Cooker* - a device for heating filter muck to drive off perc vapors for reclaiming (6 NYCRR 232.2).
  - *Multi-Color Coating* - A coating that is packaged in a single container and exhibits more than one color when applied in a single coat (6 NYCRR 205.2) [Added March 2006].
  - *Municipal Solid Waste* - all materials or substances discarded from single and multiple family dwellings, and other residential sources; similar types of materials from institutional, commercial, and industrial sources; concurrently incinerated sewage sludge but not hazardous waste as defined in 6 NYCRR Part 371 (6 NYCRR 200.1).
  - *Municipal Solid Waste Incineration Facility* - a facility that is owned, operated, or utilized by, or under contract with, a municipality or political subdivision and which utilizes high temperature thermal destruction technologies, including combustion for the recovery of thermal value or for the disposal of municipal solid waste.(NOTE: A municipal solid waste incineration facility may also be a regulated medical waste incineration facility.) (6 NYCRR 200.1).
  - *New Facility* - a facility that was not used for the operation of any dry cleaning equipment prior to the effective date of this Part (6 NYCRR 232.2).
  - *New York City Metropolitan Area* - all of the city of New York and Nassau, Suffolk, Westchester, and Rockland Counties (6 NYCRR 200.1 and 212.2).
  - *New York Metropolitan Enhanced Inspection and Maintenance Region* - the region comprising the counties of Suffolk (except Fisher's Island), Nassau, Kings, Queens, Richmond, New York, Bronx, Westchester, and Rockland (6 NYCRR 217-1.1).
  - *Nominal Capacity* - the volume indicated by the manufacturer that represents the maximum recommended filling level (6 NYCRR 239-2) [Added March 2003].
  - *Nonattainment Area* - any area of the state not meeting a National Ambient Air Quality Standard (NAAQS) for a specific air contaminant. Nonattainment areas in New York State are as follows (6 NYCRR 200.1) [Revised April 2006; Revised March 2008]:
    1. Reserved.
    2. Areas designated as "Nonattainment" for the Fine Particulate (PM<sub>2.5</sub>) NAAQS.
      - i. The New York--N. New Jersey--Long Island, NY-NJ-CT-PA area consisting of Bronx, Kings, Nassau, New York, Orange, Queens, Richmond, Rockland, Suffolk and Westchester Counties.
    3. Areas designated as "Nonattainment" for the 1-Hour Ozone NAAQS.
      - i. Nonattainment areas classified as "Severe".
        - a. The area consisting of the New York City Metropolitan Area and the Lower Orange County Metropolitan Area.
      - ii. Nonattainment areas classified as "Moderate".
        - a. The Lower Hudson Valley area consisting of Putnam and Dutchess Counties, and all of Orange County except the Lower Orange County Metropolitan Area.
      - iii. Nonattainment areas classified as "Marginal".
        - a. The Capital District area consisting of Saratoga, Montgomery, Schenectady, Albany, Rensselaer and Greene Counties.
        - b. The portion of Essex County surrounding Whiteface Mountain above an elevation of 4,500 feet.
        - c. The area consisting of all of Jefferson County.
        - d. The Niagara Frontier area consisting of Niagara and Erie Counties.

4. Areas designated as "Nonattainment" for the PM<sub>10</sub> NAAQS (Annual NAAQS revoked by EPA effective December 17, 2006).
    - i. The area consisting of all of New York County.
- *Nonconforming Gasoline* - any gasoline that does not conform to the requirements of section 225-3.3 or section 225-3.4 of this Subpart (6 NYCRR 225-3.2).
  - *Nonflat Coating* - A coating that is not defined under any other definition in this rule and registers a gloss of 15 or greater on an 85-degree meter and 5 or greater on a 60-degree meter according to ASTM Designation D 523-89 (1999) (see Table 1, section 200.9 of this Title) (6 NYCRR 205.2) [Added March 2006].
  - *Nonflat-High Gloss Coating* - A nonflat coating that registers a gloss of 70 or above on a 60-degree meter according to ASTM designation D 523-89 (1999) (see Table 1, section 200.9 of this Title) (6 NYCRR 205.2) [Added March 2006].
  - *Nonroad Engine* – (6 NYCRR 200.1) [Added January 1999]:
    1. Except as specified in paragraph (2) of this subdivision, a nonroad engine is an internal combustion engine:
      - a. in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or
      - b. in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or
      - c. that, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicators of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.
    2. An internal combustion engine is not a nonroad engine if:
      - a. the engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the Act; or
      - b. the engine is regulated by a Federal New Source Performance Standard promulgated under section 111 of the Act; or
      - c. the engine otherwise included in subparagraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph does not apply to an engine after the engine is removed from the location.
  - *Nuclear Coating* - A protective coating formulated and recommended to seal porous surfaces such as steel (or concrete) that otherwise would be subject to intrusion by radioactive materials. These coatings must be resistant to long-term (service life) cumulative radiation exposure (ASTM Method D 4082-02, see Table 1, section 200.9 of this Title), relatively easy to decontaminate, and resistant to various chemicals to which the coatings are likely to be exposed ASTM Method D 3912-95 (2001) (see Table 1, section 200.9 of this Title) (6 NYCRR 205.2) [Added March 2006].
  - *Offset Lithographic Printing Process* - application of words, designs, and pictures to a substrate by means of planographic printing technique that involves the use of a lithographic plate, where the image and nonimage areas are chemically maintained from which the inked image is transferred to an intermediate surface called a blanket that, in turn, transfers the inked image to the substrate (6 NYCRR 234.1).

- *Onsite Incinerator* - any incinerator except one used to burn refuse that is collected from more than 100 different premises and brought to the incinerator site by truck (6 NYCRR 200.1).
- *Opacity* - the degree to which emissions other than water reduce the transmission of light and obscure the view of an object in the background (6 NYCRR 200.1).
- *Open Fire* -
  1. any outdoor fire or outdoor smoke producing process from which the air contaminants are emitted directly into the outdoor atmosphere (6 NYCRR 200.1).
  2. any outdoor fire or outdoor smoke producing process from which air contaminants are emitted directly into the outdoor atmosphere. Open fires include burning in barrels or modifications thereof. Open fires do not include burning in outdoor furnaces or boilers that are used to heat buildings when the devices are actually used for such purpose (6 NYCRR 215.1) [Added March 2010].
- *Open-Top Vapor Degreasing* - process of solvent metal cleaning by condensing hot solvent vapor on the colder metal parts (6 NYCRR 226.1) [Added March 2004].
- *Openings* - any window, door or air intake (6 NYCRR 232.2).
- *Operator* - any person who leases, operates, controls, or supervises a facility at which air contaminants are emitted (6 NYCRR 200.1).
- *Outboard Engine* - a spark-ignition marine engine that, when properly mounted on a marine water craft in the position to operate, houses the engine and drive unit external to the hull of the marine water craft (6 NYCRR 239-2) [Added March 2003].
- *Outdoor Atmosphere* - the atmosphere outside of and surrounding all buildings, structures, stacks, or exterior ducts (6 NYCRR 200.1).
- *Overall Removal Efficiency* - the total reduction of volatile organic compound emissions considering the efficiency of both the capture system and of the subsequent destruction and/or removal of these air contaminants by the control equipment prior to their release into the atmosphere (6 NYCRR 212.1).
- *Owner* - any person who has legal or equitable title to an emission source, or of the control equipment at such source (6 NYCRR 200.1).
- *Oxides of Nitrogen (Also Nitrogen Oxides or NO<sub>x</sub>)* - all oxides of nitrogen, except nitrous oxide, expressed as nitrogen dioxide (6 NYCRR 200.1).
- *Oxygen Content* - the ratio of the weight of oxygen in a unit of gasoline to the total weight of the gasoline multiplied by 100, determined through the method specified in section 225-3.5 of this Subpart (6 NYCRR 225-3.2).
- *Oxygenate* - any substance which, when blended into gasoline, increases the amount of oxygen in that gasoline blend and which is allowed to be used as a gasoline additive pursuant to 42 U.S.C. 7545 (6 NYCRR 225-3.2).
- *Oxygenated Gasoline* - gasoline to which at least one oxygenate has been added and which complies with the requirements of section 225-3.4 of this Subpart (6 NYCRR 225-3.2).
- *Ozone Transport Region* - the area that includes all of New York State and the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, Pennsylvania, Rhode Island, Vermont, and the consolidated metropolitan statistical area that includes the District of Columbia and northern Virginia (6 NYCRR 200.1).

- *Packaging Rotogravure Printing Process* - rotogravure printing upon paper, paper board, metal foil, plastic film and other substrates which are, in subsequent operations, formed into either wallpaper or packaging products and labels for articles to be sold (6 NYCRR 234.1).
- *Parking Area* - a state or Federally owned parking facility, including a lot or garage, which is located in New York County, south of 60th Street (6 NYCRR 203.2).
- *Particulates* - any air or gasborne material, except water, which exists as a liquid or solid. The determination of the quantity of particulates present in a stack shall be determined in accordance with emission testing methods acceptable to the Commissioner (6 NYCRR 200.1).
- *Peak Shaving Generation* - the practice of utilizing on-site generating capacity for use at a facility (excluding emergency generation when the usual sources of heat, power, and lighting are temporarily unavailable) at the request of the primary electricity supplier (6 NYCRR 200.1) [Revised January 2002; Revised March 2006].
- *Peaking Combustion Turbine* - a combustion turbine used intermittently to produce energy during periods of extremely high (i.e. peak) power demand (6 NYCRR 227-2.2) [Revised March 2004].
- *Penetrating Prime Coat* - an application of low viscosity asphalt to an absorbent surface in order to prepare it for paving with an asphalt concrete (6 NYCRR 211.1).
- *Perceptible Leak* - any perc vapor or liquid leaks that are obvious from the odor of perc, pools or droplets of perc or the detection of gas flow by passing a finger over the surface of the equipment, or as detected by an appropriate portable monitoring instrument (6 NYCRR 232.2).
- *Perc* - a colorless volatile chlorinated hydrocarbon. Perc is also known as perchloroethylene, tetrachloroethylene, tetrachloroethene, and PCE. The chemical formula for perc is Cl(2)C:CCl(2). The CAS registry number for perc is 00127-18-4 (6 NYCRR 232.2).
- *Permeation* - the process by which individual fuel molecules may penetrate the walls and various assembly components of a portable fuel container directly to the outside ambient air (6 NYCRR 239-2) [Added March 2003].
- *Permissible Emission Rate* - the maximum rate at which air contaminants are allowed to be emitted to the outdoor atmosphere. This includes (6 NYCRR 200.1):
  1. an applicable emission limitation in this subchapter
  2. any performance standard contained in title 40 of the Code of Federal Regulations
  3. any emission limitation specified by the Commissioner as a condition of a permit to construct and/or certificate to operate.
- *Person* - any individual, public or private corporation, political subdivision, government agency, department or bureau of the state, municipality, industry, copartnership, association, firm, trust, estate, or any other legal entity whatsoever (6 NYCRR 200.1 and 6 NYCRR 239-2).
- *Personal Watercraft Engine* - a spark-ignition marine engine that does not meet the definition of outboard engine, inboard engine or sterndrive engine, except that the Executive Officer may, in his or her discretion classify a personal watercraft engine as an inboard or sterndrive engine if it is comparable in technology and emissions to an inboard or sterndrive engine (6 NYCRR 210-1.2) [Added March 2004; citation Revised March 2008].
- *PM<sub>10</sub>* - particulate matter or particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (6 NYCRR 200.1).

- *Pollutants Regulation Under Section 112(r) of the Act* - set forth in Appendix 1-21 is the list of pollutants regulated under section 112(r) of the Act as of the effective date of this part (6 NYCRR 200.1) [Added January 2002; Revised March 2003].
- *Portable Fuel Container* - any container or vessel with a nominal capacity of ten gallons or less intended for reuse that is designed or used primarily for receiving, transporting, storing, and dispensing fuel (6 NYCRR 239-2) [Added March 2003].
- *Post-Consumer Coating* - A finished coating that would have been disposed of in a landfill, having completed its usefulness to a consumer, and does not include manufacturing wastes (6 NYCRR 205.2) [Added March 2006].
- *Potential To Emit* - the maximum capacity of an air contamination source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restriction on the hours of operation, or on the type or amount of material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in enforceable permit conditions. Fugitive emissions, to the extent that they are quantifiable, are included in determining the potential to emit. For emergency power generating stationary internal combustion engines, the potential to emit will be based on a maximum of 500 hours of operation per year per engine unless a more restrictive limitation exists in a permit or registration (6 NYCRR 200.1 and 212.1) [Revised March 2010].
- *Preliminary Continuous Emissions Monitoring System Plan* - a document that includes, but is not limited to, source identification, source description, a description of the control technology, the applicable regulations, the type of monitor, a monitoring system flow diagram, a description of the data system, and a sample calculation for compliance (6 NYCRR 227-2.2).
- *Pre-Treatment Wash Primer* - A primer that contains a minimum of 0.5 acid, by weight, when tested in accordance with ASTM Designation D 1613-96 (1999) (see Table 1, section 200.9 of this Title), that is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats (6 NYCRR 205.2) [Added March 2006].
- *Primary Control System* - a refrigerated condenser or equivalent closed-loop vapor recovery system approved by the Department (6 NYCRR 232.2).
- *Primer* - A coating labeled and formulated for application to a substrate to provide a firm bond between the substrate and subsequent coats (6 NYCRR 205.2) [Added March 2006].
- *Printing Process* - the equipment used to apply words, pictures, or designs to either a continuous substrate(s) or a sheet. A continuous substrate consists of paper, plastic, or other material that is unwound from a roll, passed through ink or coating applicators and any associated drying areas. The press includes all ink and coating applicators and drying areas between unwind and rewind of the continuous substrate. A sheet consists of paper, plastic, or other material that is carried through the process on a moving belt. The press includes all ink and coating applicators and drying operations between the time that the sheet is put on the moving belt until it is taken off (6 NYCRR 234.1).
- *Private Solid Waste Incineration Facility* - any facility, other than a municipal solid waste facility, that burns municipal solid waste, or any fuels derived from municipal solid waste using thermal destruction technologies, with or without energy recovery (6 NYCRR 219.1).
- *Process* –
  1. any activity involving one or more emission sources that emits or has the potential to emit any regulated air pollutant (6 NYCRR 200.1) [Added March 2006]
  2. any industrial, commercial, agricultural or other activity, operation, manufacture or treatment in which chemical, biological and/or physical properties of the material or materials are changed, or in which the

material(s) is conveyed or stored without changing the material(s) (where such conveyance or storage system is equipped with a vent(s) and is nonmobile), and which emits air contaminants to the outdoor atmosphere. Processes do not include open fires, operation of combustion installations, and incineration of refuse other than byproducts or wastes from processes (6 NYCRR 212.1).

- *Process Ventilation Emission* - an emission from any dry cleaning machine normally vented to the outer air that occurs both during the aeration cycle and when the machine door is open, excluding any emissions from door fans on azeotropic control devices and third generation equipment (6 NYCRR 232.2).
- *Process Weight* - the total weight of all materials introduced into a process that may cause air contaminant emissions to the outdoor atmosphere. Solid fuel used in a process is considered part of the process weight, but liquid and/or gaseous fuel, uncombined water and combustion air are not (6 NYCRR 200.1 and 212.1).
- *Process Weight per Hour* - the total process weight for any emission source divided by the number of h during which air contaminants are emitted by such source to the outdoor atmosphere. For continuous processes, process weight should be determined on a daily basis (6 NYCRR 200.1 and 212.1).
- *Proof Press* - a printing press used only to check the quality of print color and editorial content (6 NYCRR 234.1).
- *Pyroprocesses* - that part of cement and lightweight aggregate manufacturing related to the preheating, calcining, sintering, burning, and cooling of clinker. Such processes include a means of chemically changing the material processed and do not include physical changes such as perlite or shale expansion (6 NYCRR 200.1).
- *Publication Rotogravure Printing Process* - rotogravure printing that is subsequently formed into books, magazines, catalogs, brochures, directors, newspaper supplements and other types of printed materials (6 NYCRR 234.1).
- *Quick-Dry Enamel* - A nonflat coating that is labeled as specified in section 205.4(h) of this Part and that is formulated to have the following characteristics (6 NYCRR 205.2) [Added March 2006]:
  1. is capable of being applied directly from the container under normal conditions with ambient temperatures between 16° and 27°C (60° and 80°F);
  2. when tested in accordance with ASTM Designation D 1640-95 (1999) (see Table 1, section 200.9 of this Title), sets to touch in two hours or less, is tack free in four hours or less, and dries hard in eight hours or less by the mechanical test method; and
  3. has a dried film gloss of 70 or above on a 60-degree meter.
- *Quick-Dry Primer Sealer and Undercoater* - A primer sealer or undercoater that is dry to the touch in 30 minutes and can be relocated in two hours when tested in accordance with ASTM Designation D 1640-95 (1999) (see Table 1, section 200.9 of this Title) (6 NYCRR 205.2) [Added March 2006].
- *Reasonably Available Control Technology (RACT)* - lowest emission limit that a particular source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility (6 NYCRR 200.1 and 212.1).
- *Recycled Coating* - An architectural coating formulated such that not less than 50 percent of the weight consists of secondary and post-consumer coating, with not less than 10 percent of the total weight consisting of post-consumer coating (6 NYCRR 205.2) [Added March 2006].
- *Refuse* - all waste material, including but not limited to garbage, rubbish, incinerator residue, street cleanings, dead animals and offal (6 NYCRR 200.1).
- *Refuse Disposal Area* - land used for depositing of refuse, except that it shall not include land used for depositing of refuse from a single family, a member of which is the owner, occupant or lessee of said land, or

any part of a farm on which animal or vegetable waste resulting from the operation of such farm are deposited. This definition includes, but is not limited to, those areas commonly referred to as landfills, sanitary landfills and dumps (6 NYCRR 200.1).

- *Regenerative Turbine* - any combustion turbine that recovers heat from the turbine exhaust gases to preheat combustion air (6 NYCRR 227-2.2).
- *Registration Certificate* - certificate issued by the Department to the owner and/or operator of an eligible facility, that has been registered pursuant to the provisions of 6 NYCRR Subpart 201-4 (6 NYCRR 200.1).
- *Refrigerated Condenser* - a closed-loop vapor recovery system into which perc vapors are condensed by cooling below the dew point of the perc using a mechanical refrigerated system (6 NYCRR 232.2).
- *Regulated Air Pollutant* - the following are regulated air pollutants for the purposes of this part (6 NYCRR 200.1) [Revised January 2002]:
  1. NO<sub>x</sub> and any volatile organic compounds.
  2. Any air pollutant or contaminant for which a national ambient air quality standard has been promulgated including PM<sub>10</sub> (particulates), SO<sub>2</sub>, CO, nitrogen dioxide, ozone, and lead.
  3. Any air pollutant or contaminant that is subject to any standard promulgated under the New Source Performance Standards (NSPS) in 40 CFR Part 60.
  4. Any Class I or II stratospheric ozone depleting substance Add list in Appendix or is it Federal.
  5. Any hazardous air pollutant.
  6. Pollutants regulated under section 112(r) of the Act (see above).
- *Reid Vapor Pressure (RVP)* - measure of the vapor pressure of a gasoline in pounds per square inch absolute at 100°F (6 NYCRR 225-3.2) [Added March 2003].
- *Remote Reservoir Degreasing* - cold cleaning degreasing performed in a device in which liquid solvent is pumped to a sink-like work area, where the metal parts are cleaned, and then drains back into an enclosed container allowing no solvent to pool in the work area (6 NYCRR 226.1) [Added March 2004].
- *Reportable Emissions* - emissions of regulated air pollutants actually emitted at the facility, except those exemptions listed below:
  1. On-road internal combustion engine emissions from mobile sources such as: automobiles, trucks, and buses.
  2. Off-road internal combustion engine emissions from mobile sources such as: lawn and garden equipment, agricultural equipment, logging equipment, light mobile commercial equipment (including generator sets, pumps, air and gas compressors, welders, pressure washers), industrial equipment (including forklifts, aerial lifts, sweepers, and scrubbers), construction equipment, airport service equipment, recreational equipment, recreational marine equipment, commercial marine vessels.
  3. Surface cleaning/degreasing for janitorial purposes other than of industrial machines at a facility subject to this subpart.
  4. Architectural surface coating (i.e., interior or exterior building painting).
  5. Asphalt paving.
  6. Commercial/Consumer solvent use; including household products, toiletries, aerosol products, rubbing compounds, windshield washing fluids, polishes and waxes, nonindustrial adhesives, space deodorants, moth control, laundry detergents, and treatment.
  7. Emissions from research and development activities at major facilities provided the emission rate does not exceed 0.1 lb/h and/or 100 lb/yr of any contaminant from an emission point and 1000 lb/yr of all contaminants at a facility.
  8. Emissions from activities exempt from permitting at major facilities provided the emission rate does not exceed 0.1 lb/h and/or 100 lb/yr of any contaminant from an emission point and 1000 lb/yr of all contaminants at a facility.

9. Emissions of individual chemicals (identified by chemical abstract number) at major facilities less than 10 lb/yr may be reported as less than 10 lb. For purposes of calculating emission fees, chemicals reported as less than 10 lb will be treated as though 10 lb of the chemical was emitted.
- *Research and Development Activities* - the primary purpose of such activities is to conduct research and development into processes and products, where such activities are conducted under the close supervision of technically trained personnel. Research and development activities shall not include activities whose primary purpose is to produce commercial quantities of materials (6 NYCRR 201-2.1).
  - *Reseller* - any person who purchases gasoline and resells or transfers it to a retailer or a wholesale purchaser-consumer (6 NYCRR 225-3.2).
  - *Residential Building* - any dwelling or housing that is owned, rented, or occupied by the same person for a period of 180 days or more in a year, excluding short-term housing such as a motel or hotel room rented and occupied by the same person for a period of less than 180 days (6 NYCRR 232.2).
  - *Retail Outlet* - any establishment at which gasoline is sold or offered for sale to the general public for use in motor vehicles (6 NYCRR 225-3.2).
  - *Retail Outlet* - any establishment at which portable fuel containers or spouts or both portable fuel containers and spouts are sold, supplied, or offered for sale (6 NYCRR 239-2) [Added March 2003].
  - *Retailer* - any person who owns, leases, operates, controls, or supervises a retail outlet (6 NYCRR 239-2) [Added March 2003].
  - *Retailer* - any person who owns, leases, operates, controls, or supervises a retail outlet (6 NYCRR 225-3.2).
  - *Rich Burn Internal Combustion Engine* - any stationary internal combustion engine that is not a lean burn internal combustion engine (6 NYCRR 227-2.2) [Revised March 2004].
  - *Ringelmann Chart* - the chart published and described in the U.S. Bureau of Mines Information circular 7718, on which are illustrated graduated shades of gray for use in estimating the light obscuring density of smoke. The "Micro" Ringelmann chart, a photographically reduced reproduction approximately 1/18 the size of the Ringelmann chart, is acceptable to the Commissioner as an equivalent standard (6 NYCRR 200.1).
  - *Roof Coating* - A non-bituminous coating labeled and formulated exclusively for application to roofs for the primary purpose of preventing penetration of the substrate by water or reflecting heat and ultraviolet radiation. Metallic pigmented roof coatings which qualify as metallic pigmented coatings shall not be considered in this category, but shall be considered to be in the metallic pigmented coatings category (6 NYCRR 205.2) [Added March 2006].
  - *Room Enclosure* - a room that encloses the dry cleaning machine or equipment. It is constructed of material that is impermeable to perc and designed and operated to maintain negative pressure at all times that the equipment is operating and is used with a general exhaust ventilation system (6 NYCRR 232.2).
  - *Rotogravure Printing Process* - application of words, designs, and pictures to a substrate by means of an intaglio printing operation in the inked image is transferred from minute etched or engraved wells on a plate or cylinder to the substrate that is supported by an impression roller (6 NYCRR 234.1).
  - *Routine Maintenance, Repair, Or Replacement* - whether work done at an emissions source constitutes routine maintenance, repair, or replacement is determined on a case-by-case basis by examining factors such as the nature and extent, purpose, frequency, and cost of the work. Although no single factor is conclusive, generally routine maintenance, repair, or replacement work is undertaken on a prescribed or regular schedule, limited in scope, and typically paid for out of the operation and maintenance budget of the facility. Work that is infrequent, extensive in scope, intended to extend the life expectancy of an emission source, or intended to



result in regaining lost capacity or availability is less likely to constitute routine maintenance, repair or replacement (6 NYCRR 200.1) [Added March 2009].

- *Rubbish* - solid or liquid waste materials, including but not limited to paper and paper products; rags; trees or leaves, needles and branches therefrom; vines; lawn and garden debris; furniture; cans; crockery; plastics; cartons; chemicals; paint; greases; sludges; oils and other petroleum products; wood; sawdust; demolition materials; tires, automobiles, and other vehicles and parts for junk, salvage, or disposal. Rubbish shall not include garbage, incinerator residue, street sweepings, dead animals, or offal (6 NYCRR 200.1).
- *Rust Preventive Coating* - A coating formulated exclusively for nonindustrial use to prevent the corrosion of metal surfaces and labeled as specified in section 205.4(f) of this Part (6 NYCRR 205.2) [Added March 2006].
- *Screen Printing* - application of words, designs, and pictures to a substrate by delivering ink through a tightly stretched fabric to which a refined form of stencil has been applied. The stencil and mesh openings determine the form and dimensions of the imprint. Excluded from this definition are inks/coatings or adhesives that are applied by hand held squeegee. A hand held squeegee is one that is not propelled through the use of any mechanical conveyance and is not an integral part of the screen printing process (6 NYCRR 234.1).
- *Secondary Control System* - a device or apparatus that reduces the concentration of perc in the recirculating air at the end of the drying cycle beyond the level achievable with a refrigerated condenser alone. For example, an integral carbon adsorber used in fourth generation equipment constitutes a secondary control system (6 NYCRR 232.2).
  1. An "integral" secondary control system is designed and offered as an integral part of a production package with a single make and model of dry cleaning machine and primary control system.
  2. An "add-on" secondary control system is designed or offered as a separate retrofit system for use on multiple machine makes and models.
- *Second Generation Equipment* - a dry-to-dry vented-dry cleaning machine that is not vented to a refrigerated condenser. Typically these machines are properly vented to a control device that may, for example, consist of a carbon adsorber or azeotropic control device plus a small carbon adsorber (6 NYCRR 232.2).
- *Self-service Dry Cleaning Machine* - a perc dry cleaning machine that is loaded, activated, or unloaded by the customer (6 NYCRR 232.2).
- *Shellac* - A clear or opaque coating formulated solely with the resinous secretions of the lac beetle ('*Lacifer lacca*'), thinned with alcohol and formulated to dry by evaporation without a chemical reaction (6 NYCRR 205.2) [Added March 2006].
- *Significant Air Contamination Source* - any air contamination source the emissions of which alone or in combination with others can be expected to have an adverse effect on ambient air quality during an air pollution episode. This category includes, but is not limited to: fossil fuel burning equipment with a maximum operating heat input exceeding 200 MBtu/h; processes and exhaust or ventilating systems with particulate emissions in excess of 100 lb/h; incinerators with a refuse charging capacity of 2000 lb/h or more (6 NYCRR 207.1).
- *Simple Cycle Combustion Turbine* - any combustion turbine that does not recover heat from the turbine exhaust gases (6 NYCRR 227-2.2) [Revised March 2004].
- *Small Boiler* - a boiler with a maximum heat input capacity greater than 20 MBtu/h (10 MBtu/h for coal and residual oil fired sources in the severe ozone nonattainment area) and equal to or less than 50 MBtu/h (6 NYCRR 227-2.2) [Revised March 2004].
- *Small Carbon Adsorbers* - a carbon unit that is used to adsorb perc from the machine drum when the machine door is opened to remove clothes at the end of the drying cycle. For example, the adsorbers used to control emissions from supplemental door fans or azeotropic control devices would constitute small carbon adsorbers (6 NYCRR 232.2).

- *Smoke* - an air contaminant consisting of small gasborne particles emitted by an air contamination source in sufficient number to be observable (6 NYCRR 200.1).
- *Solvent Metal Cleaning* - process of cleaning soils from metal surfaces by using a volatile organic compound (VOC) (6 NYCRR 226.1) [ Added March 2004].
- *Spark-Ignition Marine Engine* - any engine used to propel a marine watercraft, and which utilizes the spark-ignition combustion cycle; including, but not limited to personal watercraft, outboard, inboard and sterndrive engines (6 NYCRR 210-1.2) [Added March 2004].
- *Special and Extreme Solvent Metal Cleaning* - the use of degreasers (6 NYCRR 226.1) [Added March 2004]:
  - to clean metal parts in the manufacturing and rework of electronic parts, assemblies, boxes, wiring harnesses, sensors and connectors used in aerospace service
  - to clean metal parts used in the manufacturing of ozone, nitrous oxide, fluorine, chlorine, bromine, halogenated compounds, or oxygen in concentrations greater than 23 percent
  - to clean metal parts exposed to ozone, nitrous oxide, fluorine, chlorine, bromine, halogenated compounds, or oxygen in concentrations greater than 23 percent.
- *Specialty Primer, Sealer and Undercoater* - A coating labeled as specified in section 205.4(g) of this Part and that is formulated for application to a substrate to seal fire, smoke or water damage, to condition excessively chalky surfaces, or to block stains. An excessively chalky surface is one that is defined as having a chalk rating of four or less as determined by ASTM Designation D 4214-98 (see Table 1, section 200.9 of this Title) (6 NYCRR 205.2) [Added March 2006].
- *Spill Proof Spout* - any spout that complies with all of the performance standards specified in Section 239-3.2 (6 NYCRR 239-2) [Added March 2003].
- *Spill Proof System* - any configuration of portable fuel container and firmly attached spout that complies with all of the performance standards in Section 239-3.1 (6 NYCRR 239-2) [Added March 2003].
- *Spout* - any device that can be firmly attached to a portable fuel container for conducting pouring through which the contents of a portable fuel container can be dispensed (6 NYCRR 239-2) [Added March 2003].
- *Stack* - any conduit, chimney, duct, vent, flue, or opening of any kind arranged to conduct air contaminants to the outdoor atmosphere (6 NYCRR 200.1).
- *Stack Sample* - a sample of the emission from an air contamination source collected from within a stack (6 NYCRR 200.1).
- *Stain* - A clear semi-transparent or opaque coating labeled and formulated to change the color of a surface but not conceal the grain pattern or texture (6 NYCRR 205.2) [Added March 2006].
- *Standard Conditions* - a temperature of 20 °C (68 °F) and an absolute pressure of 760 mm Hg (30 in.) (6 NYCRR 200.1).
- *State Implementation Plan* - the documents, including regulations, approved by the Administrator under the Act that identify actions and programs to be undertaken by the State and its subdivisions to implement the Act (6 NYCRR 200.1).
- *Stationary Internal Combustion Engine* - any internal combustion engine of either the reciprocating or rotary type whose uses may include, but are not limited to, the generation of electric power, pumping gases and liquids, and compressing air for pneumatic machinery (6 NYCRR 227-2.2) [Added March 2004].

- *Stationary source* - any building, structure, facility or installation, excluding nonroad engines, that emits or may emit any air pollutant (6 NYCRR 200.1) [Revised January 1999].
- *Sterndrive Engine* - a four-stroke spark-ignition marine engine not used in a personal watercraft that is designed such that the drive unit is external to the hull of the marine watercraft, while the engine is internal to the hull of the marine watercraft (6 NYCRR 210-1.2) [Added March 2004].
- *Still* - distillation equipment used to volatilize and recover perc from contaminated solvent removed from the cleaned materials (6 NYCRR 232.2).
- *Swimming Pool Coating* - A coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals (6 NYCRR 205.2) [Added March 2006].
- *Swimming Pool Repair and Maintenance Coating* - A rubber based coating labeled and formulated to be used over existing rubber based coatings for the repair and maintenance of swimming pools (6 NYCRR 205.2) [Added March 2006].
- *System* - as used in the term “system averaging”, a combination of sources regulated under this Title which are owned or operated by the same person, provided that the person holds department operating permits for each source (6 NYCRR 227-2.2) [Revised March 2004].
- *Temperature-Indicator Safety Coating* - A coating labeled and formulated as a color-changing indicator coating for the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment, and for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F) (6 NYCRR 205.2) [Added March 2006].
- *Thermoplastic Rubber Coating and Mastic* - A coating or mastic formulated and recommended for application to roofing or other structural surfaces and that incorporates no less than 40 percent by weight of thermoplastic rubbers in the total resin solids and may also contain other ingredients including, but not limited to, fillers, pigments, and modifying resins (6 NYCRR 205.2) [Added March 2006].
- *Tint Base* - An architectural coating to which coloring is added after packaging in sale units to produce a desired color (6 NYCRR 205.2) [Added March 2006].
- *Title V* - refers to Title V of the Act and all rules promulgated in accordance with it (6 NYCRR 200.1).
- *Third Generation Equipment* - a closed-loop dry cleaning machine equipped with a refrigerated condenser or other equivalent primary control system (6 NYCRR 232.2).
- *Title V Facility Permit* - permit for a facility or a defined area source, group, or category of emission units at a facility that is issued by the Department pursuant to Subpart 201-6 (6 NYCRR 201-2.1).
- *Traffic Marking Coating* - A coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks and airport runways (6 NYCRR 205.2) [Added March 2006].
- *Transfer Machine* - perc dry cleaning equipment in which washing and extraction are performed in one unit and drying is performed in a separate unit.
- *Tune-up* - adjustments made to a boiler in accordance with procedures supplied by the manufacturer (or an approved specialist) to optimize the combustion efficiency (6 NYCRR 227-2.2) [Revised March 2004].
- *Ultimate Consumer* - the first person who purchases or obtains gasoline for use in motor vehicles (6 NYCRR 225-3.2).

- *Unit Space Heater* - a small heating unit, which may be portable, used at a non-residential facility for warming air of an enclosed area, such as a room (6 NYCRR 200.1).
- *Vapor Adsorber* - a bed of activated carbon or other adsorbent into which vapors are introduced and trapped for subsequent desorption (6 NYCRR 232.2).
- *Vapor Barrier* - a material surface or coating that is impermeable to perc (6 NYCRR 232.2).
- *Vapor Control System* - a system that prevents emissions to the outdoor atmosphere from exceeding 4.7 gr/gal (80 g/1000 L) of petroleum liquid loaded (6 NYCRR 230.1).
- *Vapor Leak* - a fugitive emission of perc vapor from unintended openings in the dry cleaning system. A vapor leak can be indicated by a rapid audible signal or visual signal from a halogenated-hydrocarbon detector or other approved instrument (6 NYCRR 232.2).
- *Vehicle* - a device by which any person or property may be propelled, moved, or drawn upon a highway, excepting a device moved exclusively by human power or used exclusively upon stationary rails or tracks (6 NYCRR 218-1.2) [Added March 2003].
- *Very Large Boiler* - a boiler with a maximum heat input capacity greater than 250 MBtu/h (6 NYCRR 227-2.2) [Revised March 2004].
- *Volatile Organic Compound (VOC)* - any organic compound that participates in atmospheric photochemical reactions. This includes any organic compounds other than those compounds with negligible photochemical reactivity that is listed below. For purposes of determining compliance with emission limits in this Subchapter, VOC will be measured by test methods in appendix A of 40 CFR 60 or by an alternative method acceptable to the Department on the basis of a demonstration that it is as accurate as the appendix A method. Where such a method also inadvertently measures compounds with negligible photochemical reactivity, an owner or operator may exclude these negligibly reactive compounds when determining compliance with a VOC emission standard. The following compounds are not volatile organic compounds (6 NYCRR 200.1):
  1. CO
  2. CO<sub>2</sub>
  3. carbonic acid
  4. metallic carbides or carbonates
  5. ammonium carbonate
  6. methane
  7. ethane
  8. 1,1,1 trichloroethane (methyl chloroform)
  9. trichlorotrifluoroethane (CFC-113)
  10. methylene chloride
  11. trichlorofluoromethane (CFC-11);
  12. dichlorodifluoromethane (CFC-12)
  13. chlorodifluoromethane (CFC-22)
  14. trifluoromethane (FC-23)
  15. 1,2 dichlorotetrafluoroethane (CFC-114)
  16. chloropentafluoroethane (CFC-115)
  17. perfluorocarbon compounds which are: cyclic, branched, or linear completely fluorinated alkanes; cyclic, branched, or linear completely fluorinated ethers with no unsaturations; cyclic, branched, or linear completely fluorinated tertiary amines with no unsaturations; or sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine,
  18. dichlorotrifluoroethane (HCFC-123)
  19. tetrafluoroethane (HFC-134a)
  20. dichlorofluoroethane (HCFC-141b)
  21. chlorodifluoroethane (HCFC-142b)
  22. 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)

- 23. pentafluoroethane (HFC-125)
  - 24. 1,1,2,2-tetrafluoroethane (HFC-134)
  - 25. 1,1,1-trifluoroethane (HFC-143a)
  - 26. 1,1-difluoroethane (HFC-152a)
  - 27. parachlorobenzotrifluoride (PCBTF)
  - 28. cyclic, branched, or linear completely methylated siloxanes
  - 29. acetone
  - 30. perchloroethylene (tetrachloroethylene)
  - 31. methyl acetate
  - 32. 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)
  - 33. 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)
- *Waste Fuel* - either of the following to be burned singly, together, or in combination with fuel oil:
    1. waste fuel A
    2. waste fuel B (6 NYCRR 225-2.2).
  - *Waste Fuel A* - any waste oil, fuel oil, or mixture of these to be burned which contains between 25 and 250 ppm (by weight) lead and which meets the limitations of Table 1-1 below and does not contain chemical waste (6 NYCRR 225-2.2).
  - *Waste Fuel B* - any fuel to be burned which does not meet the following limitations and/or contains any chemical waste (6 NYCRR 225-2.2).

| <b>Constituent/Property</b>     | <b>Allowable</b>                              |
|---------------------------------|---|
| Polychlorinated Biphenyls (PCB) | Less than 50 ppm                              |
| Total Halogens                  | 1000 ppm1 maximum                             |
| Sulfur                          | See Appendix 1-13 for fuel sulfur limitations |
| Lead                            | 250 ppm* maximum                              |
| Gross Heat Content              | 125,000 (Btu/gal) minimum                     |

\* Parts per million (ppm) by weight (water free basis) of fuel.

- *Waste Oil* - used and/or reprocessed engine lubricating oil and/or any other used oil, including but not limited to, fuel oil, engine oil, gear oil, cutting oil, transmission fluid, hydraulic fluid, dielectric fluid, oil storage tank residue, animal oil, and vegetable oil, which has not subsequently been rerefined (6 NYCRR 225-2.2).
- *Water Separator* - a vessel that uses gravity to physically separate liquid perc from liquid water (6 NYCRR 232.2).
- *Waterproofing Sealer* - A coating labeled and formulated for application to a porous substrate for the primary purpose of preventing the penetration of water (6 NYCRR 205.2) [Added March 2006].
- *Waterproofing Concrete/Masonry Sealer* - A clear or pigmented film-forming coating that is labeled and formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light, and staining (6 NYCRR 205.2) [Added March 2006].
- *Weighted Average Allowable Emission Rate* - the average emission rate of all operating sources in a system averaging where the mass emission rate of the sources in operation is equivalent to the mass emission rate achieved with each source operating in compliance with the most stringent applicable RACT emission limit (6 NYCRR 227-2.2) [Revised March 2004].
- *Wholesale Purchaser-Consumer* - any ultimate consumer of gasoline who purchases or obtains gasoline from a supplier for use in motor vehicles and receives delivery of that product into a storage tank, substantially under the control of that person, of at least 550-gal capacity (6 NYCRR 225-3.2).

- *Wood* - the fibrous material beneath and including the bark of trees or any derivative fuel or residue thereof, in any unadulterated form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings and processed pellets made from wood or other forest residues (6 NYCRR 200.1).
- *Wood Preservative* - A coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. section 136, 'et. seq'.) (see Table 1, section 200.9 of this Title) and with Part 326 of this Title (6 NYCRR 205.2) [Added March 2006].
- *Vehicle* - a device by which any person or property may be propelled, moved, or drawn upon a highway, excepting a device moved exclusively by human power or used exclusively upon stationary rails or tracks.

**AIR EMISSIONS MANAGEMENT  
GUIDANCE FOR NEW YORK CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

|                                     |                                    |
|-------------------------------------|------------------------------------|
| Missing Checklist Items             | AE.2.1.NY.                         |
| State-Specific Requirements         |                                    |
| General                             | AE.5.1.NY. and AE.5.2.NY.          |
| Permits/Notifications/Exemptions    | AE.6.1.NY. through AE.6.8.NY.      |
| Management/Administrative           | AE.7.1.NY. through AE.7.3.NY.      |
| Operations                          | AE.8.1.NY. and AE.8.2.NY.          |
| Emissions Limits                    | AE.9.1.NY. through AE.9.3.NY.      |
| Fuel-Burning Equipment              | AE.15.1.NY. through AE.15.10.NY.   |
| Miscellaneous Incinerators          | AE.25.1.NY. through AE.25.16.NY.   |
| Medical Waste Incinerators          | AE.30.1.NY. through AE.30.8.NY.    |
| New Municipal Waste Combustors      | AE.36.1.NY.                        |
| Municipal Solid Waste Incinerators  | AE.40.1.NY. through AE.40.8.NY.    |
| Gasoline/Fuels                      | AE.55.1.NY. through AE.55.17.NY.   |
| Printing Presses and Graphic Arts   | AE.60.1.NY. through AE.60.6.NY.    |
| Dry Cleaning Operations             | AE.75.1.NY. through AE.75.30.NY.   |
| Acid Production Units               | AE.80.1.NY. through AE.80.6.NY.    |
| Coating Operations                  | AE.100.1.NY. through AE.100.7.NY.  |
| Degreasing Operations               |                                    |
| General                             | AE.115.1.NY. through AE.115.3.NY.  |
| Cold Cleaning                       | AE.116.1.NY. and AE.116.2.NY.      |
| Vapor Cleaning                      | AE.117.1.NY. and AE.117.4.NY.      |
| Open Burning                        | AE.130.1.NY. through AE.130.3.NY.  |
| Vehicle Emissions                   | AE.135.1.NY. through AE.135.11.NY. |
| Asphalt Paving Materials/Operations | AE.145.1.NY. and AE.145.2.NY.      |
| County/City-Specific Requirements   | AE.160.1.NY. through AE.160.3.NY.  |

| GUIDANCE FOR APPENDIX USERS |  |
|-----------------------------|--|
| REFER TO APPENDIX NUMBERS:  | REFER TO APPENDIX TITLES:  |
| 1-1                         | Activities Exempt from Permitting Requirements   |
| 1-2                         | Trivial Activities Exempt from Permitting Requirements   |
| 1-3                         | Hazardous Air Pollutants   |
| 1-4                         | Sources Deferred From Title V Permitting   |
| 1-5                         | [Deleted]  |
| 1-6                         | Process Emission Limits Sources Exempted from Process Emissions Requirements   |
| 1-7                         | Determination of Applicable Emission Standards   |
| 1-8                         | Permissible Emission Rates for Stationary Combustion Installations Burning Solid Fuel                                    |
| 1-9                         | Control Requirements for Major Sources of NO <sub>x</sub>  |
| 1-10                        | Testing, Monitoring, and Reporting Requirements  |
| 1-11                        | Particulate Matter Emission Rate for Existing Incinerators, Excluding New York City, and Nassau and Westchester Counties |
| 1-12                        | Particulate Matter Emission Rate for Existing Incinerators, New York City, and Nassau and Westchester Counties           |
| 1-13                        | Sulfur-in-Fuel Limitations   |
| 1-14                        | Ventilation Emission Points for Perchloroethylene Dry Cleaning Facilities  |
| 1-15                        | Public Notice for Perchloroethylene Dry Cleaning Facilities  |
| 1-16                        | Regulated Coating Lines and Volatile Organic Compound VOC Content Limits   |
| 1-17                        | Motor Vehicle Emissions Standards  |
| 1-18                        | [Deleted]  |
| 1-19                        | VOC Content Limits for Architectural Coatings in the New York City Metropolitan Area                                     |
| 1-20                        | Gas Cap Integrity Test   |
| 1-21                        | Pollutants Regulated Under Section 112(r) of the Act   |



| <b>COMPLIANCE CATEGORY:<br/>AIR EMISSIONS MANAGEMENT<br/>New York Supplement</b>   |   |
|--|---|
| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>AE.2.</b></p> <p><b>MISSING CHECKLIST<br/>ITEMS</b></p> <p><b>AE.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

| <b>COMPLIANCE CATEGORY:</b><br><b>AIR EMISSIONS MANAGEMENT</b><br><b>New York Supplement</b>  |   |
|---|---|
| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <b>STATE-SPECIFIC REQUIREMENTS</b><br><br><b>AE.5. General</b><br><br><b>AE.5.1.NY.</b> Emissions of air contaminants must not be caused or allowed (6 NYCRR Section 211.2).<br><br><br><br><br><br><br><br><br><br><b>AE.5.2.NY.</b> Emissions must not be concealed through the use of air or other gases as diluting agents (6 NYCRR Section 202-1.5). | <p>Verify that emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic, or duration which are injurious to human, plant, or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property are not caused or allowed.</p> <p>(NOTE: This prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic, or deleterious emission, either alone or in combination with others.)</p> <p>Verify that air emissions are not diluted with air or other gases in order to achieve compliance with an emission standard based on concentration of gases emitted through a stack.</p> |

| <b>COMPLIANCE CATEGORY:<br/>AIR EMISSIONS MANAGEMENT<br/>New York Supplement</b>   |  |
|--|--|
| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <b>STATE-SPECIFIC<br/>REQUIREMENTS</b><br><br><b>AE.6.<br/>Permits / Notifications /<br/>Exemptions</b><br><br><b>AE.6.1.NY.</b> Air contamination sources must obtain an operating permit or registration certificate from the Department (6 NYCRR 201-1.1).<br><br><b>AE.6.2.NY.</b> Exempt air contamination sources must meet specific requirements (6 NYCRR 201-3.1(a), 201-3.1(e), and 201-3.2(a)) [Revised March 2003; Revised March 2008]. | <p>Verify that, unless exempt or trivial, air contamination sources have an operating permit or registration certificate from the Department.</p> <p>(NOTE: See Appendices 1-1 and 1-2 for lists of activities exempt from permitting or registration requirements.)</p> <p>(NOTE: Exempt activities listed Appendix 1-1 are exempt from state registration and permitting provisions only, not from other state requirements or from applicable registration and permitting requirements of local air pollution control agencies. Trivial activities listed in Appendix 1-2 may be exempt from other requirements.)</p> <p>Verify that exempt emission sources maintain records (that will demonstrate compliance) on-site for 5 yr and make them available to representatives of the Department upon request.</p> <p>(NOTE: Department representatives must be granted access to any facility that contains emission sources or units, during normal operating hours, for the purpose of determining compliance with state and Federal air pollution control requirements.)</p> <p>Verify that, within 30 days of subscribing to the Emergency Demand Response Program (EDRP) established by the New York Independent System Operator (NYISO), the owner and/or operator of any centrally dispatched emergency power generating unit reports the following to the Department:</p> <ul style="list-style-type: none"> <li>- the location of the unit</li> <li>- the name, address, e-mail address, telephone number, and facsimile transmission number of the owner and/or operator of the unit</li> <li>- the size of the unit in terms of kilowatts or megawatts of electricity generating capacity</li> <li>- the fuel type capability of the unit (natural gas, diesel, etc.)</li> <li>- the fuel consumption rating of the unit in terms of gal per hour, million British thermal units per hour, or other available metric with individual figures reflecting 25 percent, 50 percent, 75 percent and 100 percent capacity usages</li> <li>- the NO (x) emission rate potential of the unit in terms of pounds per hour, pounds per million British thermal units of heat input, or other available</li> </ul> |

| <b>COMPLIANCE CATEGORY:<br/>AIR EMISSIONS MANAGEMENT<br/>New York Supplement</b>   |  |
|--|--|
| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
|  | <p>metric.</p> <p>Verify that, within 30 days of receiving a start-up signal which was initiated by the NYISO pursuant to the EDRP, the owner and/or operator of any centrally dispatched emergency power generating unit that operated pursuant to the NYISO signal reports the following to the Department:</p> <ul style="list-style-type: none"> <li>- the location of the unit</li> <li>- the electric grid load reduction in terms of kilowatts or megawatts achieved by the operation of the unit</li> <li>- the start-up and shut-down times for the unit</li> <li>- the types of fuel that the unit has received since 1 May 2001.</li> </ul>   |
| <p><b>AE.6.3.NY.</b> Stationary sources that meet specific requirements must register with the Department as minor facilities (6 NYCRR 201-1.1(b), 201-4.1(a), 201-4.2(d)) [Revised March 2008].</p> | <p>Verify that the following stationary sources that are not exempt or trivial and do not require a state facility permit or a Title V permit register with the Department as a minor facility:</p> <ul style="list-style-type: none"> <li>- gasoline dispensing sites</li> <li>- existing stationary sources that are in industrial categories to which a New Source Performance Standard (NSPS) applies, with potential emissions of regulated contaminants below the applicability thresholds or which have been deferred from the requirement for obtaining a Title V permit</li> <li>- existing stationary sources which emit any contaminant listed as a hazardous air pollutant (see appendix 1-3) with a potential to emit below the applicability thresholds or which have been deferred from the requirement for obtaining a Title V permit</li> <li>- any stationary source which has its potential to emit capped by rule</li> <li>- any stationary source which has annual actual emissions of any regulated air contaminant that do not exceed the appropriate threshold, regardless of the facility's potential to emit for that contaminant.</li> </ul> <p>Verify that construction of the minor facility does not commence until the registration certificate is received from the Department</p> <p>(NOTE: The Department will notify the owner/operator on the acceptability of the registration within 30 days of receipt.)</p> <p>(NOTE: Gasoline dispensing site. Any site where gasoline is dispensed into vehicle fuel tanks or into portable containers used to fuel any motor from any stationary storage container(s) larger than 250 gallons (6NYCRR 230.1).</p> |
| <p><b>AE.6.4.NY.</b> Stationary sources that meet specific criteria must have a state facility permit (6 NYCRR 201-4.1(b), 201-5.1(a), and</p>   | <p>Verify that stationary sources that meet the following criteria have a state facility permit:</p> <ul style="list-style-type: none"> <li>- the stationary source is not exempt or trivial (see Appendices 1-1 and 1-2)</li> <li>- the stationary source is not eligible to register as a minor source</li> </ul>  |

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| <p>201-5.1(b)).</p> <p><b>AE.6.5.NY.</b> Stationary sources that meet specific requirements must have a Title V operating permit (6 NYCRR 201-6.1(a) through (c)).</p> <p><b>AE.6.6.NY.</b> Major sources must meet RACT</p> | <ul style="list-style-type: none"> <li>- the stationary source is not required to obtain a Title V permit.</li> </ul> <p>Verify that new stationary sources including, but not limited to, the following are not constructed without a state facility permit:</p> <ul style="list-style-type: none"> <li>- stationary sources requiring an emission cap to avoid the requirement to obtain a Title V permit or other applicable requirement</li> <li>- stationary sources subject to any Department approved variance</li> <li>- new facilities that are in industrial categories to which a NSPS applies with a potential to emit that is below major stationary source thresholds including those that have been deferred from the requirement to obtain a Title V permit</li> <li>- new facilities that emit any contaminant listed as a hazardous air pollutant.</li> </ul> <p>Verify that existing emission units are not modified without a permit modification.</p> <p>Verify that the following stationary sources have a Title V operating permit:</p> <ul style="list-style-type: none"> <li>- any major stationary source</li> <li>- any stationary source subject to a standard or limitation, or other requirement under the Federal NSPS</li> <li>- any stationary source including an area source, subject to a standard or other requirement regulating hazardous air pollutants</li> <li>- any affected source</li> <li>- any stationary source in a category designated by the Administrator and added by the Department pursuant to rulemaking.</li> </ul> <p>Verify that no new stationary source that is required to obtain a Title V facility permit is constructed before obtaining a permit from the Department.</p> <p>(NOTE: The following are exempt or deferred from the requirement to obtain a Title V facility permit:</p> <ul style="list-style-type: none"> <li>- stationary sources that are not major stationary sources, affected sources, or municipal solid waste incineration units required to obtain a permit pursuant to the NSPS for municipal solid waste incineration units</li> <li>- non-major sources subject to the standards listed in Appendix 1-4 are deferred from Title V permitting requirements until 9 December 1999; such sources will have to submit Title V applications before 9 December 2000</li> <li>- all emission sources and source categories subject to Federal permit requirements for new residential wood heaters</li> <li>- all emission sources and source categories subject to the Federal National Emission Standard for Hazardous Air Pollutants for Asbestos, Section 61.145, Standards for Demolition and Renovation.</li> <li>- stationary sources that have accepted federally enforceable emission caps.)</li> </ul> <p>(NOTE: 6 NYCRR 212.10 applies to the following:</p> <ul style="list-style-type: none"> <li>- facilities located in the Lower Orange County or New York City</li> </ul> |

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| <p>requirements (6 NYCRR 212.10).</p> <p><b>AE.6.7.NY.</b> Regulated process emission sources must comply with sampling and monitoring requirements (6 NYCRR 212.11(a) and</p> | <p>metropolitan areas with an annual potential to emit of 25 tons or more of NO<sub>x</sub> or 25 tons or more of volatile organic compounds (VOCs)</p> <ul style="list-style-type: none"> <li>- facilities located outside of the lower Orange County and New York City metropolitan areas with an annual potential to emit of 100 tons or more of NO<sub>x</sub> or 50 tons or more of VOCs.)</li> </ul> <p>(NOTE: A facility was eligible for an exemption if it could be demonstrated that net ozone air quality benefits are greater in the absence of reductions of nitrogen oxides from the facility.)</p> <p>Verify that the source has met all conditions of an approved compliance plan or permit requirements for RACT.</p> <p>Verify that VOC emission points which are equipped with a capture system and a control device with an overall removal efficiency of at least 81 percent are equipped with RACT.</p> <p>Verify that coating processes which meet both of the following requirements are equipped with RACT:</p> <ul style="list-style-type: none"> <li>- they are not subject to the surface coating requirements of section AE.100</li> <li>- they use a surface coating with a maximum VOC content of 3.5 lb VOC/gal as applied (minus water and excluded VOC).</li> </ul> <p>Verify that facilities with annual potential to emit levels below the requirements for RACT or reduction in emissions maintained records at the facility on a monthly basis that verify the facility's annual actual emissions.</p> <p>Verify that upon reasonable request, these records are submitted to the Department in an acceptable format.</p> <p>Verify that any exceedance of the annual potential to emit conditions for any calendar yr is reported to the Department within thirty days of the end of that calendar year.</p> <p>(NOTE: Facilities that commence construction after 15 August 1994 must implement RACT on these emission points immediately upon commencement of operations. A RACT analysis is not required for new emission points with nitrogen oxide and VOC emission rate potentials less than 3.0 lb/hr and actual emissions in the absence of control equipment less than 15.0 lb/day at facilities located outside of the Lower Orange County and New York City metropolitan areas.)</p> <p>Verify that any source which is required to demonstrate compliance conducts capture efficiency and/or stack emissions testing using procedures acceptable to the Department.</p> <p>Verify that any source equipped with the following emission control equipment</p> |

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| <p>(b)).</p> <p><b>AE.6.8.NY.</b> Surface coating processes must obtain a permit (6 NYCRR 228.1) [Added March 2004].</p> | <p>installs continuous monitors and data recorders for the required parameter:</p> <ul style="list-style-type: none"> <li>- exhaust gas temperature from thermal or catalytic incinerators</li> <li>- temperature rise across catalytic incinerator beds</li> <li>- volatile organic compound outlet concentrations from fixed-bed carbon adsorption units</li> <li>- outlet gas temperature from refrigerated condensers.</li> </ul> <p>Verify that continuous monitors are operated at all times when the associated process equipment is operating, except during any quality assurance and routine maintenance activities.</p> <p>Verify that each monitor is operated according to an approved quality assurance program.</p> <p>(NOTE: This checklist item is repeated in AE.100.NY.)</p> <p>Verify that every owner or operator of a facility containing a coating line described in Appendix 1-16 and which meets the following applicability criteria obtains a Title V facility permit, a State facility permit or a registration under Part 201 (Permits and Registrations) of this Title, as appropriate:</p> <ul style="list-style-type: none"> <li>- a coating line listed in Appendix 1-16 and located in the New York City metropolitan area</li> <li>- a coating line listed in Table 1 of Appendix 1-16 and located in the Lower Orange County metropolitan area, for which the annual potential to emit volatile organic compounds (VOCs) from all sources at the facility, regardless of process type but excluding combustion installations, equals or exceeds 10 tons</li> <li>- a coating line listed in Table 2 of appendix 1-16 and located in the Lower Orange County metropolitan area, for which the annual potential to emit VOCs from all sources at the facility, regardless of process type but excluding combustion installations, equals or exceeds 25 tons</li> <li>- a coating line listed in Table 1 of Appendix 1-16 and located outside the New York City metropolitan area and the Lower Orange County metropolitan area, for which the annual potential to emit VOCs from all sources at the facility, regardless of process type but excluding combustion installations, equals or exceeds 10 tons</li> <li>- a coating line listed in Table 2 of Appendix 1-16 and located outside the New York City metropolitan area and the Lower Orange County metropolitan area, for which the annual potential to emit VOCs from all sources at the facility, regardless of process type but excluding combustion installations, equals or exceeds 50 tons</li> <li>- every owner or operator of a facility that applies mobile equipment repair and refinishing or color-matched coatings to mobile equipment or mobile equipment components regardless of the facility's location or annual potential to emit VOCs is in compliance with this Part by January 1, 2005.</li> </ul> |

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|  | (NOTE: Any coating line that is or becomes subject to these provisions will remain subject to these provisions even if the annual potential to emit VOCs for the facility later falls below the thresholds.) |



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| <b>STATE-SPECIFIC<br/>REQUIREMENTS</b><br><br><b>AE.7.<br/>Management /<br/>Administrative</b><br><br><b>AE.7.1.NY.</b> Emission statements must be submitted for emissions or potential emissions that exceed limitations for regulated air pollutants (6 NYCRR Sections 202-2.1 and 202-2.4(a)) [Revised March 2006].<br><br><b>AE.7.2.NY.</b> Emission report recordkeeping requirements must be met (6 NYCRR Section 202-2.5) [Revised March 2006].<br><br><b>AE.7.3.NY.</b> Facilities that are or have a significant air contamination source must submit proposed episode action plans to the Commissioner within 60 days of his request (6 NYCRR Sections 207.2(a) and 207.3(d)). | <p>Verify that any owner or operator of a facility located in New York State which is determined to be a major source for all or any part of such calendar year submits emission statement.</p> <p>Verify that any owner or operator of a facility located in an ozone non-attainment area which emits NOx or VOCs equal to or greater than 25 tons during any such calendar year submits emission statement.</p> <p>Verify that emission statements are submitted to the Department on or before April 15th each yr for emissions of the previous calendar year.</p> <p>Verify that records of emission statements submitted to the department are maintained for 5 yr.</p> <p>Verify that the records indicate how the information submitted was determined, including calculations, data, measurements, and estimates used.</p> <p>Verify that the facility has submitted a proposed episode action plan to reduce air contaminants during each stage of an air pollution episode within 60 days of the Commissioner's request.</p> <p>Verify that the facility takes the prescribed actions whenever an air pollution episode is in effect.</p> |

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| <b>STATE-SPECIFIC REQUIREMENTS</b><br><br><b>AE.8. Operations</b><br><br><b>AE.8.1.NY.</b> Any emission control device must be operated properly and kept in a satisfactory state of maintenance and repair (6 NYCRR Section 200.7).<br><br><b>AE.8.2.NY.</b> Collected air contaminants must be properly removed from air cleaning devices (6 NYCRR Section 201-1.8). | <p>Verify that all emission control devices are operated, maintained, and repaired in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications.</p> <p>Verify that air contaminants collected by the air-cleaning devices are handled in a manner so that the contaminants are not reintroduced to the atmosphere.</p> <p>Verify that, where practical, collected air contaminants are recycled or salvaged.</p> |

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| <p><b>STATE-SPECIFIC REQUIREMENTS</b></p> <p><b>AE.9.<br/>Emissions Limits</b></p> <p><b>AE.9.1.NY.</b> Air emissions must not exceed opacity limits (6 NYCRR Sections 211.3).</p> <p><b>AE.9.2.NY.</b> Process emission sources must meet restrictions on emissions of air contaminants to the outdoor atmosphere (6 NYCRR Sections 212.3, 212.4, and 212.6).</p> | <p>Verify that the facility does not have air emissions with an opacity equal to or greater than 20 percent (6 min average), except for one continuous 6-min period per h of not more than 57 percent opacity.</p> <p>(NOTE: The following sources are exempt from these requirements: Open fires for which a restricted burning permit has been obtained, and sources permitted by a specific Part of the NYCRR.)</p> <p>(NOTE: See Appendix 1-6 for a list of process emission sources not subject to the following requirements).</p> <p>(NOTE: Existing sources are those permitted before 1 July 1973. New sources are those that an application for a permit to construct was received by the Department after 1 July 1973.)</p> <p>Verify that the facility does not cause or allow emissions that violate the requirement specified in Appendix 1-7, Table 2, Table 3 or Table 4 for the environmental rating issued by the Commissioner.</p> <p>Verify that for new sources in instances where determination of permissible emission rate using process weight is not applicable (see Appendix 1-7, Table 5) and for an environmental rating of B or C, the facility does not cause or allow emissions of solid particulates that exceed 0.050 grains of particulates/ft<sup>3</sup> of exhaust gas, expressed at standard conditions on a dry gas basis.</p> <p>Verify that for existing sources in instances where determination of permissible emission rate using process weight is not applicable (see Appendix 1-7, Table 5) and for an environmental rating of B or C, the facility does not cause or allow emissions of solid particulates that exceed 0.15 gr particulate matter/ft<sup>3</sup> of exhaust gas, corrected for dilution air and expressed at standard conditions on a dry gas basis.</p> <p>Verify that emissions do not have an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water.</p> <p>(NOTE: Upon written application, the Commissioner may accept an equivalent opacity standard exceeding the opacity standard. An equivalent opacity standard for an emission source will only be granted where reasonably available control technology (RACT), as determined by the commissioner, has been utilized. In</p> |

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| <p><b>AE.9.3.NY.</b> The shakedown period of any major facility or new or modified emission source(s) at an existing facility must meet specific requirements (6 NYCRR Sections 231-3.9) [Added March 2009].</p> | <p>such cases, the source owner/operator must not cause or allow emissions to exceed the equivalent opacity.)</p> <p>Verify that the shakedown period does not exceed 180 days from the date of commencement of operation.</p> <p>(NOTE: The department may specify a shakedown period of less than 180 days in a permit.)</p> <p>Verify that the total mass emissions during the shakedown period is quantified, in a manner approved by the department, and included in the calculation demonstrating compliance with the permitted annual limit in tons per year (tpy) of the facility or emission source(s).</p> <p>(NOTE: Emission limits other than annual emission limitations do not apply to a major facility or new or modified emission source(s) at an existing facility during the shakedown period. However, the owner or operator must make all reasonable efforts to minimize emissions during the shakedown period.)</p> |

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| <b>AE.15.</b><br><br><b>FUEL-BURNING EQUIPMENT</b><br><br><b>AE.15.1.NY.</b> The construction of hand-fired bituminous coal unit is prohibited (6 NYCRR Section 227-1.1).<br><br><b>AE.15.2.NY.</b> Particulate emissions from stationary combustion units must be limited (6 NYCRR Section 227-1.2) [Revised January 2000; Revised January 2001]. | <p>Verify that the facility does not construct, install, or modify any stationary, hand-fired combustion unit designed to burn bituminous coal.</p> <p>Verify that the facility does not cause or allow an emission into the outdoor atmosphere of particulates in excess of:</p> <ul style="list-style-type: none"> <li>- 0.10 lb/MBtu heat input capacity from any stationary combustion installation with a maximum operating total heat input exceeding 250 MBtu/h using oil, coal tar, or any liquid fuel derived from coal</li> <li>- 0.20 lb/MBtu heat input capacity from any stationary combustion installation with a maximum operating total heat input exceeding 50 MBtu/h but no greater than 250 MBtu/h using oil (other than distillate oil), coal tar, or any liquid fuel derived from coal</li> <li>- 0.10 lb/MBtu heat input capacity from any stationary combustion installation with a maximum operating total heat input exceeding 250 MBtu/h using coal and/or wood, coke, or any solid fuel derived from coal for which an application for a permit to construct was received by the Department subsequent to 11 August 1972</li> <li>- the permissible emission rates specified in Appendix 1-8 from any stationary combustion installation burning coal and/or wood, coke, or any solid fuel derived from coal not subject to the previous paragraph.</li> </ul> <p>(NOTE: If two or more simultaneously operated furnaces are connected to a common air cleaning device and/or stack, the total heat input of all furnaces connected to the device and/or stack shall be the heat input for the purpose of computing the permissible emission rate.)</p> <p>(NOTE: Individual combustion installations with a maximum heat input capacity equal to or less than 300 MBtu/hr and in operation prior to 1 June 1972, may exceed the values in Table 1 provided they meet the following criteria:</p> <ul style="list-style-type: none"> <li>- spreader stokers-permissible emission rate do not exceed 0.60 lb/million Btu input</li> <li>- other than spreader stokers-permissible emission rate do not exceed the following:</li> </ul> <table> <tr> <td>Maximum Heat<br/>Input Capacity<br/>(million Btu/hr)</td><td>Permissible<br/>Emission Rate<br/>(lb/million Btu)***</td></tr> </table> | Maximum Heat<br>Input Capacity<br>(million Btu/hr) | Permissible<br>Emission Rate<br>(lb/million Btu)*** |
| Maximum Heat<br>Input Capacity<br>(million Btu/hr)   | Permissible<br>Emission Rate<br>(lb/million Btu)***  |  |   |

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| AE.15.3.NY. Opacity from stationary combustion installations must be limited (6 NYCRR Section 227-1.3) [Revised January 2000].   | =====  |         |      |     |      |     |
|  | <table><tr><td>1 - 100</td><td>0.60</td></tr><tr><td>200</td><td>0.45</td></tr><tr><td>300</td><td>0.30</td></tr></table> <p>***Calculate intermediate values by linear interpolation.</p> <p>Verify that no one operates a stationary combustion installation that exhibits greater than 20 percent opacity (6 min average), except for one 6-min period per h of not more than 27 percent opacity.</p> <p>(NOTE: Compliance with the opacity standard may be determined by:</p> <ul style="list-style-type: none"><li>- conducting observations in accordance with Reference Method 9</li><li>- evaluating Continuous Opacity Monitoring System (COMS) records and reports</li><li>- considering any other credible evidence.</li></ul> <p>(NOTE: Upon written application by a source owner, the commissioner may accept an equivalent opacity standard less stringent than the opacity standard for a stationary combustion installation with a maximum operating heat input greater than 50 MBtu per hour, if the source owner can demonstrate through acceptable emission tests for the stationary combustion installation that it is in compliance with all applicable emission standards other than the opacity standard and that the source and any associated emission control equipment is operated and maintained in a manner acceptable to the Commissioner. Any stationary combustion installation to be eligible for an equivalent opacity standard must have applied Best Available Control Technology (BACT) as determined by the Commissioner. Any equivalent opacity standard granted by the commissioner shall be submitted to the USEPA for approval as a SIP revision. The owner or operator of a source for which an equivalent opacity standard has been accepted must not cause or allow emissions to exceed the equivalent opacity.)</p> | 1 - 100 | 0.60 | 200 | 0.45 | 300 |
| 1 - 100  | 0.60   |         |      |     |      |     |
| 200  | 0.45   |         |      |     |      |     |
| 300  | 0.30   |         |      |     |      |     |
| AE.15.4.NY. Stationary combustion installations with a maximum operating total heat input capacity exceeding 250 MBtu/h must meet specific requirements (6 NYCRR Sections 227-1.4 and 227.1-5) [Revised January 2000]. | <p>(NOTE: These requirements do not apply to gas turbines. Where gas is the only fuel burned, monitoring and recording of opacity is not required.)</p> <p>Verify that accurate instruments (satisfying the criteria in appendix B of title 40, part 60 of the Code of Federal Regulations, or approved by the commissioner on an individual case basis) is operated to continuously monitor and record opacity.</p> <p>Verify that, when sulfur dioxide continuous monitoring is required, continuously monitoring and recording of either the percent oxygen or carbon dioxide in flue gases is conducted at all times that the combustion installation is in service.</p> <p>Verify that an accurate excess emissions and monitoring system performance report is submitted to the Department for each calendar yr quarter.</p>   |         |      |     |      |     |

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| <p><b>AE.15.5.NY.</b> Stationary combustion installations must take corrective actions when air contamination or pollution requirements are violated (6 NYCRR Section 227-1.6) [Revised January 1998; Revised January 1999].</p> <p><b>AE.15.6.NY.</b> Major sources of NO<sub>x</sub> must meet specific requirements (6 NYCRR Sections 227-2.1 and 2.3(a)) [Revised March 2004].</p> | <p>(NOTE: All reports must be certified by a responsible corporate official as true, accurate and complete and postmarked by the 60th day following the end of each calendar quarter.)</p> <p>(NOTE: For opacity measurements, the excess emissions report will consist of all 6-min periods during which the average opacity of emissions equals or exceeds 20 percent, except that one 6-min average per h of up to 27 percent need not be reported.)</p> <p>(NOTE: If the sum of the maximum heat input capacity of all furnaces, which are operated simultaneously and are connected to a common air cleaning device and/or a common stack, exceeds 250 MBtu/h total heat input, stack monitoring will be required.)</p> <p>(NOTE: When two or more different fuels are burned simultaneously in a single furnace of a stationary combustion installation, the permissible emission rate for a contaminant will be the sum of the permissible emission rates of the contaminant for each fuel multiplied by the heat derived from such fuel.)</p> <p>(NOTE: The Commissioner may accept a source and set forth alternative monitoring and reporting requirements.)</p> <p>Verify that a stationary combustion installation involved in violation of air contamination and pollution control requirements ceases operation or takes one of the following steps:</p> <ul style="list-style-type: none"> <li>- is equipped with approved emission control equipment</li> <li>- is rehabilitated or upgraded in an approved manner</li> <li>- the fuel is changed to an acceptable type.</li> </ul> <p>(NOTE: The provisions of this section apply to owners or operators of the following types of major stationary sources of NO<sub>x</sub>:</p> <ul style="list-style-type: none"> <li>- very large boilers</li> <li>- large boilers</li> <li>- mid-size boilers</li> <li>- small boilers</li> <li>- combustion turbines</li> <li>- stationary internal combustion engines</li> <li>- other combustion sources.)</li> </ul> <p>Verify that every type of major stationary sources of NO<sub>x</sub> obtains a permit.</p> |

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| <b>AE.15.7.NY.</b> Major sources of NO <sub>x</sub> must have an approved operating plan (6 NYCRR Section 227-2.3(c)) [Revised January 1999; Revised March 2008]. | <p>(NOTE: See AE.15.6.NY. for applicability.)</p> <p>Verify that major sources have an approved operating plan that includes the following:</p> <ul style="list-style-type: none"> <li>- a summary of compliance with applicable standards and requirements, including any system averaging and any higher specific unit emission rates</li> <li>- a description of the combustion process, including the procedures for the control of NO<sub>x</sub> emissions</li> <li>- procedures for monitoring unit operating parameters</li> <li>- procedures for ash handling</li> <li>- procedures for monitoring emissions</li> <li>- reporting and recordkeeping procedures</li> <li>- any operating manual for the source</li> <li>- the name and title of operating personnel and, if applicable, their qualifications (e.g., licenses, certificates, education, training courses completed).</li> </ul> |
| <b>AE.15.8.NY.</b> Major sources of NO <sub>x</sub> must comply with emissions limits (6 NYCRR Sections 227-2.4) [Revised March 2004].                            | <p>(NOTE: See AE.15.6.NY. for applicability.)</p> <p>Verify that major sources comply with the presumptive RACT emission limits in Appendix 1-9 or case-by case determinations.</p> <p>(NOTE: Presumptive RACT limits are category-wide requirements based on capabilities that are general to a source category.)</p>   |
| <b>AE.15.9.NY.</b> Major sources of NO <sub>x</sub> must comply with testing, monitoring, and reporting requirements (6 NYCRR Sections 227-2.6).                  | <p>(NOTE: See AE.15.6.NY. for applicability.)</p> <p>Verify that major sources comply with the appropriate testing, monitoring, and reporting requirements listed in Appendix 1-10.</p>  |
| <b>AE.15.10.NY.</b> Stationary internal combustion engines must have a compliance and operating plan (6 NYCRR Sections 227-2.3) [Revised March 2004].             | <p>(NOTE: This checklist item applies to owners or operators of a stationary internal combustion engine of 200 horsepower or larger in the severe ozone nonattainment area, and 400 horsepower in the rest of the State that provides primary power or is used for peak shaving generation.</p> <p>Verify that by July 1, 2004, the owner or operator of any stationary internal combustion engine or any source that previously received a case-by-case RACT determination, submits an updated version of the compliance plan and an updated version of the operating plan.</p> <p>Verify that owners or operators of any stationary internal combustion engine that becomes newly subject to these regulations, submit, along with the facility's</p>  |



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|  | <p>permit application or request for a permit modification, a compliance plan and an operating plan.</p> <p>Verify that the compliance plan describes the following:</p> <ul style="list-style-type: none"> <li>- measures that will be implemented to achieve compliance</li> <li>- a schedule showing the timing of implementation of the measures</li> <li>- if the compliance measures entail the permanent shutdown of the source, the modification, surrender, or planned expiration of the permit assures that the source is shutdown no later than April 1, 2005.</li> </ul> <p>Verify that the operating plan includes:</p> <ul style="list-style-type: none"> <li>- a summary of the applicable standards and how this facility will comply, including any system averaging and any higher specific source emission rates that may apply</li> <li>- the combustion process, including the procedures for the control of NOx emissions</li> <li>- procedures for monitoring source operating parameters</li> <li>- procedures for ash handling</li> <li>- procedures for monitoring emissions</li> <li>- procedures for reporting and recordkeeping</li> <li>- any operating manual for the source</li> <li>- the names and titles of operating personnel and, if applicable, their qualifications ('e.g.,' licenses, certificates, education, training courses completed.)</li> </ul> |

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| <p><b>AE.25.</b></p> <p><b>MISCELLANEOUS INCINERATORS</b></p> <p><b>AE.25.1.NY.</b> Existing incinerators must limit particulate emissions (6 NYCRR Section 219-5.2).</p> <p><b>AE.25.2.NY.</b> Existing incinerators must meet opacity limits (6 NYCRR Section 219-5.3).</p> | <p>(NOTE: Existing incinerators are those that, as of 1 January 1989, were either:</p> <ul style="list-style-type: none"> <li>- already installed or constructed</li> <li>- had submitted an application for a permit to construct.)</li> </ul> <p>(NOTE: This section does not apply to incinerators in New York City, Nassau County, or Westchester County.)</p> <p>Verify that existing incinerators having a capacity of 2000 lb/h or less, and built and installed after 1 January 1968, are designed, built, installed, and operated to meet the emission limits of Appendix 1-11.</p> <p>Verify that any existing incinerator larger than 2000 lb/h capacity, and built after 1 January 1970, will be operated so as not to produce particulate emissions which exceed the emission limits of Appendix 1-11.</p> <p>Verify that existing incinerators having a capacity of 2000 lb/h or less, and built or installed between 1 April 1962, and 1 January 1968, are operated so as not to produce particulate emissions which exceed 0.5 lb/h for every 100 lb/h of refuse charged, unless a final order by the Commissioner provides otherwise.</p> <p>Verify that any existing incinerator larger than 2000 lb/h capacity and built between 1 April 1962, and 1 January 1970, is operated so as not to produce particulate emissions which exceed 0.5 lb/h for every 100 lb/h of refuse charged, unless a final order by the Commissioner provides otherwise.</p> <p>(NOTE: Incinerators built or installed prior to 1 April 1962 either must meet these requirements or be upgraded to meet the emission limits of Appendix 1-11.)</p> <p>(NOTE: See AE.25.1.NY. for applicability.)</p> <p>Verify that no incinerator, built or installed after 26 January 1967, regardless of size, emits visible emissions having an average opacity during any consecutive 6 min of greater than 20 percent, under normal operating conditions.</p> <p>Verify that no incinerator, built or installed prior to 26 January 1967, regardless of size, is operated so as to emit visible emissions having an average opacity during any consecutive 6 min of greater than 20 percent, under normal operating conditions.</p> |

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| <b>AE.25.3.NY.</b> Emission tests must be conducted on existing incinerators (6 NYCRR Section 219-5.4).   | <p>(NOTE: See AE.25.1.NY. for applicability.)</p> <p>Verify that all existing incinerators larger than 2000 lb/h capacity are tested using emission tests acceptable to the Commissioner.</p> <p>Verify that all incinerators built or installed after 1 January 1968, and having a capacity of 2000 lb/h or less, are tested using emission tests acceptable to the Commissioner.</p> <p>(NOTE: Units that are representative models may be tested instead of an actual incinerator, using emission tests acceptable to the Commissioner.)</p>  |
| <b>AE.25.4.NY.</b> Existing incinerators in New York City, Nassau County, and Westchester County must limit particulate emissions (6 NYCRR Section 219-6.2).          | <p>(NOTE: This section applies to any incinerator that was installed or constructed, or for which an application for a permit to construct was received prior to 1 January 1989 located in New York City and Nassau and Westchester Counties.)</p> <p>Verify that existing incinerators do not have particulate emissions in excess of the permissible particulate emission shown in Appendix 1-12.</p> <p>(NOTE: If two or more incinerators are connected to a single stack, the total refuse charged to all incinerators connected to the same stack will be the refuse charged for the purpose of determining the permissible particulate emission.)</p> <p>(NOTE: If a single incinerator is connected to two or more stacks, the refuse charged to the single incinerator will be the refuse charged for the purpose of determining the permissible particulate emission.)</p> |
| <b>AE.25.5.NY.</b> Existing incinerators in New York City, Nassau County, and Westchester County must meet opacity limits (6 NYCRR Section 219-6.3).                  | <p>(NOTE: See AE.25.4.NY. for applicability.)</p> <p>Verify that no incinerator emits smoke having an average opacity during any consecutive 6 min equal to or greater than 20 percent, except for one 6-min period per h during which the average opacity does not exceed 40 percent.</p>   |
| <b>AE.25.6.NY.</b> Odorous emissions from existing incinerators in New York City, Nassau County, and Westchester County must be controlled (6 NYCRR Section 219-6.4). | <p>(NOTE: See AE.25.4.NY. for applicability.)</p> <p>Verify that, for existing continuous fed incinerators, the gas temperature at the furnace outlet is automatically maintained at not less than 1400 °F while the incinerator is in operation.</p> <p>Verify that for batch fed incinerators, the gas temperature at the furnace outlet is automatically maintained at not less than 1400 °F during 90 percent of the burning period.</p>   |

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|   | <p>Verify that incinerators with a capacity of 2000 lb/h or less of refuse charged are equipped with a sensing device indicating the gas temperature at the furnace outlet.</p> <p>Verify that incinerators with a capacity of greater than 2000 lb/h of refuse charged are equipped with a sensing device and recorder to measure and record the temperature at the furnace outlet.</p> <p>Verify that recorder chart temperature records for incinerators with a capacity greater than 2000 lb/h of refuse charged are retained for a period of 3 yr.</p> <p>(NOTE: Upon application, the Commissioner may modify the provisions of this section when the applicant can show to the satisfaction of the Commissioner that the odorous emission can be and is controlled with equivalent effectiveness.)</p> |
| <p><b>AE.25.7.NY.</b> Existing incinerators in New York City, Nassau County, and Westchester County must meet ambient air quality standards (6 NYCRR Section 219-6.6) [Revised January 1999].</p> | <p>(NOTE: See AE.25.4.NY. for applicability.)</p> <p>Verify that no existing incinerator emits air contaminants in quantities that alone or in combination with emissions from other air contamination sources would contravene any established ambient air quality standard and/or cause air pollution.</p>  |
| <p><b>AE.25.8.NY.</b> Existing incinerators in New York City, Nassau County, and Westchester County must meet opacity limits (6 NYCRR Section 219-6.3).</p>                                       | <p>(NOTE: See AE.25.4.NY. for applicability.)</p> <p>Verify that no incinerator emits smoke having an average opacity during any six consecutive minutes equal to or greater than 20 percent, except for one 6-min period per h during which the average opacity does not exceed 40 percent.</p>  |
| <p><b>AE.25.9.NY.</b> Crematories must limit particulate emissions (6 NYCRR 219-4.3).</p>   | <p>(NOTE: This section applies to new and modified (after 1 January 1989) facilities used for the cremation of human and animal bodies and body parts and for the incineration of associated animal bedding.)</p> <p>Verify that no emission sources within a crematory cause or allows particulate emissions in excess of 0.08 gr/dry standard cubic foot (dscf) of flue gas, corrected to 7 percent oxygen.</p>   |
| <p><b>AE.25.10.NY.</b> Crematories must meet design requirements (6 NYCRR 219-</p>  | <p>(NOTE: See AE.25.9.NY. for applicability.)</p> <p>Verify that furnace design provides for a residence time for combustion gas of at</p>  |

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| <p>4.4).</p> <p><b>AE.25.11.NY.</b> Crematories must meet operating requirements (6 NYCRR 219-4.5).</p> <p><b>AE.25.12.NY.</b> Crematories must restrict the types and amounts of wastes burned (6 NYCRR 219-4.6).</p> <p><b>AE.25.13.NY.</b> Crematories must use continuous emission monitors (6 NYCRR 219-4.7).</p> | <p>least 1 s at no less than 1800 °F.</p> <p>Verify that, for a multichamber incinerator, a residence time of at least 1 s at no less than 1400 °F is provided after the primary combustion chamber.</p> <p>Verify that auxiliary burners have automatic modulating temperature controls for their combustion chamber.</p> <p>Verify that mechanically fed crematories meet the following requirements:</p> <ul style="list-style-type: none"> <li>- an air lock system that prevents opening the incinerator to the room environment</li> <li>- the volume of the loading system is designed so as to prevent overcharging.</li> </ul> <p>(NOTE: See AE.25.9.NY. for applicability.)</p> <p>Verify that no emission sources within a crematory cause or allows emissions to the outdoor atmosphere having a 6 min average opacity of 10 percent or greater.</p> <p>Verify that the proper temperatures (see AE.25.10.NY above) are maintained at during operation of the incinerator.</p> <p>Verify that the Commissioner is notified in writing at least ten days prior to the commencement of operation of a new or modified crematory.</p> <p>(NOTE: See AE.25.9.NY. for applicability.)</p> <p>Verify that the following types of waste are not burned in a crematory:</p> <ul style="list-style-type: none"> <li>- municipal solid waste</li> <li>- radioactive wastes, unless the particular crematory is exempt from or has been issued a permit pursuant to 6 NYCRR 380</li> <li>- hazardous waste, unless the particular crematory is exempt from or has been issued a permit pursuant to 6 NYCRR 373.</li> </ul> <p>Verify that, for infectious waste (other than pathological waste and animal bedding), no more than 5 percent of the total permitted hourly charging rate is burned in a crematory.</p> <p>(NOTE: See AE.25.9.NY. for applicability.)</p> <p>Verify that the crematory operates and maintains instruments that continuously monitor and record the exit temperatures from both the primary combustion</p> |

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| <p><b>AE.25.14.NY.</b> Crematories must conduct and report stack tests (6 NYCRR 219-4.8).</p>                                      | <p>chamber and the secondary (or last) combustion chamber.</p> <p>(NOTE: See AE.25.9.NY. for applicability.)</p> <p>Verify that crematories demonstrate that each incinerator complies with air emission standards through either of the following methods:</p> <ul style="list-style-type: none"> <li>- onsite testing</li> <li>- submission of a test report for an identical incinerator tested in New York and approved by the Commissioner.</li> </ul> <p>Verify that a test protocol, including the configuration of breeching, stack locations, test port locations, and test methods is submitted to the Commissioner at least 30 days prior to stack testing.</p> <p>Verify that all stack tests are witnessed by the Commissioner's representative.</p> <p>Verify that three copies of the stack test report are submitted to the Commissioner within 60 days after completion of the tests.</p> |
| <p><b>AE.25.15.NY.</b> Crematory operators must be certified (6 NYCRR 219-4.10) [Revised January 1998].</p>                        | <p>(NOTE: See AE.25.9.NY. for applicability.)</p> <p>Verify that crematories are operated under the onsite direction of a person possessing an appropriate incinerator operator certification issued by the Commissioner.</p>  |
| <p><b>AE.25.16.NY.</b> Crematories must be inspected annually (6 NYCRR 219-4.11) [Revised January 1998; Revised January 1999].</p> | <p>(NOTE: See AE.25.9.NY. for applicability.)</p> <p>Verify that crematories are inspected annually.</p> <p>Verify that the crematory submits the annual inspection report to the Commissioner, certifying that the condition and operation of that crematory, including the calibration of all instrumentation, meet manufacturer's specifications.</p>   |

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| <p><b>AE.30.</b></p> <p><b>MEDICAL WASTE<br/>INCINERATORS</b></p> <p><b>AE.30.1.NY.</b> Infectious waste incinerators must limit emissions (6 NYCRR 219-3.3 and 219-3.4).</p> <p><b>AE.30.2.NY.</b> Infectious waste incinerators must meet design requirements (6 NYCRR 219-3.5).</p> | <p>(NOTE: This checklist item applies to new, modified, and existing infectious waste incinerators whose total permitted charging rate is less than 50 tons/day.)</p> <p>Verify that infectious waste incinerators do not cause or allow emissions of particulate matter into the outdoor atmosphere in excess of:</p> <ul style="list-style-type: none"> <li>- 0.030 gr/dscf flue gas, corrected to 7 percent oxygen for: <ul style="list-style-type: none"> <li>- any incinerator, existing as of 1 January 1989, and which is used to burn infectious waste at the site of waste generation</li> <li>- any incinerator modification or replacement, occurring after 1 January 1989, and which is used to burn infectious waste at the site of waste generation and whose hourly charging rate does not exceed the hourly charging rate of the original unit</li> </ul> </li> <li>- 0.015 gr/dscf flue gas, corrected to 7 percent oxygen for: <ul style="list-style-type: none"> <li>- any incineration located at a facility not generating infectious waste</li> <li>- any incinerator for which an application for Permit to Construct is received after 1 January 1989, and which is located at a facility not generating infectious waste or whose hourly charging rate exceeds the hourly charging rate of the original unit.</li> </ul> </li> </ul> <p>Verify that infectious waste incinerators do not cause or allow a running 3-h average emission of hydrogen chloride to exceed 10 percent by weight of the uncontrolled emissions (90 percent reduction) unless one of the following conditions exist:</p> <ul style="list-style-type: none"> <li>- it is demonstrated that the stack concentration is less than 50 ppm by volume, dry basis, corrected to 7 percent oxygen</li> <li>- the uncontrolled emission rate is less than 4 lb/h and the total charging rate is less than 500 lb/h.</li> </ul> <p>(NOTE: This checklist item applies to new, modified, and existing infectious waste incinerators whose total permitted charging rate is less than 50 tons/day.)</p> <p>Verify that furnace design provides for a residence time for combustion gas of at least 1 s at no less than 1800 °F.</p> <p>Verify that, for a multichamber incinerator, a residence time of at least 1 s at no less than 1400 °F is provided after the primary combustion chamber.</p> <p>Verify that auxiliary burners have automatic modulating temperature controls for</p> |

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|   | <p>their combustion chamber.</p> <p>Verify that mechanically fed crematories meet the following requirements:</p> <ul style="list-style-type: none"> <li>- an air lock system that prevents opening the incinerator to the room environment</li> <li>- the volume of the loading system is designed so as to prevent overcharging.</li> </ul> <p>Verify that the incinerator is designed so that the flue gas temperature at the outlet of the final control device does not exceed 300 °F unless a demonstration is made that an equivalent collection of condensible heavy metals and toxic organics can be achieved at a higher temperature or through the use of alternate technologies.</p>  |
| <p><b>AE.30.3.NY.</b> Infectious waste incinerators must meet operating requirements (6 NYCRR 219-3.6).</p>                     | <p>(NOTE: This checklist item applies to new, modified, and existing infectious waste incinerators whose total permitted charging rate is less than 50 tons/day.)</p> <p>Verify that infectious waste incinerators do not cause or allow emissions to the outdoor atmosphere that have a 6 min average opacity of 10 percent or greater.</p> <p>Verify that infectious waste incinerators do not cause or allow emissions of CO to the outdoor atmosphere that have an hourly average concentration in the flue gas exceeding 150 ppm by volume, dry basis, corrected to 7 percent oxygen.</p> <p>Verify that the proper temperatures (see AE.30.2.NY above) are maintained at all times during the operation of the incinerator.</p> <p>Verify that the Commissioner is notified in writing at least 10 days prior to the commencement of operation of a new or modified infectious waste incinerator.</p> |
| <p><b>AE.30.4.NY.</b> Infectious waste incinerators must restrict the types and amounts of wastes burned (6 NYCRR 219-3.7).</p> | <p>(NOTE: This checklist item applies to new, modified, and existing infectious waste incinerators whose total permitted charging rate is less than 50 tons/day.)</p> <p>Verify that the quantity of human and animal body parts that are burned do not exceed the limits in the Certificate to Operate.</p> <p>Verify that radioactive waste is not burned unless the particular incinerator is exempt from or has been issued a permit pursuant to 6 NYCRR 380.</p> <p>Verify that hazardous waste is not burned unless the particular incinerator is exempt from or has been issued a permit pursuant to 6 NYCRR 373.</p>  |
| <p><b>AE.30.5.NY.</b> Medical waste incinerators must use continuous emission monitors</p>                                      | <p>(NOTE: This checklist item applies to new, modified, and existing infectious waste incinerators whose total permitted charging rate is less than 50 tons/day.)</p>   |



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| <p>(6 NYCRR 219-3.8).</p> <p><b>AE.30.6.NY.</b> Infectious waste incinerators must conduct and report stack tests (6 NYCRR 219-3.9).</p> <p><b>AE.30.7.NY.</b> Infectious waste incinerator operators must be certified (6 NYCRR 219-3.11) [Revised January 1998].</p> <p><b>AE.30.8.NY.</b> Infectious waste incinerators must be inspected annually (6 NYCRR 219-3.12) [Revised January 1998; Revised January 1999].</p> | <p>Verify that the medical waste incinerators operate and maintain instruments that continuously monitor and record the following:</p> <ul style="list-style-type: none"> <li>- primary combustion chamber exit temperature</li> <li>- secondary (or last) combustion chamber exit temperature</li> <li>- temperature leaving the final air pollution control device</li> <li>- CO</li> <li>- opacity (if an opacity monitor cannot be applied satisfactorily, alternate apparatus may be employed, with the approval of the Commissioner, to demonstrate acceptable operation of the particulate removal device).</li> </ul> <p>(NOTE: This checklist item applies to new, modified, and existing infectious waste incinerators whose total permitted charging rate is less than 50 tons/day.)</p> <p>Verify that air emissions of infectious waste incinerators are tested at start-up and annually thereafter for particulates, HCl, oxygen and CO emissions.</p> <p>Verify that the same type and amount of waste are burned during testing as under normal operating circumstances.</p> <p>Verify that a test protocol, including the configuration of breeching, stack location, test port location, and test methods, are submitted to the Commissioner at least 30 days prior to stack testing.</p> <p>Verify that all stack tests are witnessed by the Commissioner's representative.</p> <p>Verify that three copies of the stack test report are submitted to the Commissioner within 60 days after completion of the tests.</p> <p>(NOTE: This checklist item applies to new, modified, and existing infectious waste incinerators whose total permitted charging rate is less than 50 tons/day.)</p> <p>Verify that infectious waste incinerators are operated under the onsite direction of a person possessing an appropriate incinerator operator certification issued by the Commissioner.</p> <p>(NOTE: This checklist item applies to new, modified, and existing infectious waste incinerators whose total permitted charging rate is less than 50 tons/day.)</p> <p>Verify that infectious waste incinerators are inspected annually.</p> <p>Verify that the infectious waste incinerator submits the annual report to the Commissioner, certifying that the condition and operation of that crematory, including the calibration of all instrumentation, meet manufacturer's</p> |

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| <p><b>AE.36.</b></p> <p><b>NEW MUNICIPAL WASTE COMBUSTORS</b></p> <p><b>AE.36.1.NY.</b> Large municipal waste combustion units must meet specific emission standards for mercury (6 NYCRR 219-7.1 and 7.2) [Added March 2003].</p> | <p>Verify that, in addition to the mercury requirements contained in 40 CFR Part 60, Subpart Cb, incorporated by reference in 6 NYCRR Part 200 (see Table 2, section 200.10), the emission limitation for mercury of 28 ug/dscm (corrected to 7 percent oxygen) or 85 percent removal, whichever is less stringent, is met.</p> <p>(NOTE: Annual compliance is based on the average of the annual stack tests on each municipal waste combustor (MWC) unit at the facility using the stack testing procedures contained in 40 CFR 60.58b(d)(2). This average of all the facility's MWC units must be in compliance with the emission limit of 28 ug/dscm (corrected to seven percent oxygen) or 85 percent removal, whichever is less stringent. However, the average of annual stack tests on each MWC unit at the facility must be in compliance with the federal limit of 80 ug/dscm (corrected to seven percent oxygen) or 85 percent removal, whichever is less stringent. Four years after the effective date of this Subpart the averaging of the annual stack tests across all incinerators at the facility will end and each of the facility's incinerators must be in compliance with the emission limit of 28 ug/dscm (corrected to seven percent oxygen) or 85 percent removal, whichever is less stringent. Emission control devices must be kept in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such devices effectively. Compliance with this Subpart is required within one year of the effective date of this Subpart. Initial compliance testing must take place within 180 days of the compliance date of this Subpart (30 September 2002).)</p> |

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| <p><b>AE.40.</b></p> <p><b>MUNICIPAL SOLID<br/>WASTE INCINERATORS</b></p> <p><b>AE.40.1.NY.</b> New or modified municipal or private solid waste incinerators must control emissions (6 NYCRR 219-2.2) [Revised March 2003].</p> | <p>(NOTE: This section applies to any new or modified municipal solid waste incineration facility or any new or modified private solid waste incineration facility in the State of New York for which an initial permit to construct a source of air contamination is issued 120 days or more after 1 January 1989.)</p> <p>Verify that particulate emissions into the outdoor atmosphere do not exceed 0.010 gr/dscf exhaust gas, corrected to 7 percent oxygen.</p> <p>Verify that HCl emissions (over a running 8-h average) do not exceed 10 percent by weight of the uncontrolled emissions (90 percent reduction) unless it is demonstrated that the stack concentration is less than 50 ppm by volume (dry corrected to 7 percent oxygen).</p> <p>Verify that NO<sub>x</sub> emissions are limited by the use of best available control technology (BACT).</p> <p>(NOTE: Solid waste incinerators in a nonattainment area for ozone must apply lowest achievable emission rate technology (LAER) to limit NO<sub>x</sub> emissions as may be required by either the applicable state implementation plan or a cumulative impact assessment of the proposed incinerator in combination with all existing and proposed NO<sub>x</sub> sources.)</p> <p>Verify that solid waste incinerators do not exceed the facility-specific dioxin equivalent emission limits set by the Commissioner.</p> <p>Verify that a dioxin equivalent emission concentration in excess of 2 ng/dscm, corrected to 7 percent oxygen, is emitted from any affected emission source based on emission testing.</p> <p>Verify that, in addition to the mercury requirements contained in 40 CFR Part 60, Subpart Eb, the emission limitation for mercury is 28 ug/dscm (corrected to 7 percent oxygen) or 85 percent removal, whichever is less stringent.</p> <p>(NOTE: Annual compliance with mercury emission limitations is based on the average of the annual stack tests on each incinerator at the facility using the stack test procedures contained in 40 CFR 60.58b(d)(2). This average of all the facility's incinerators must be in compliance with the emission limit of 28 ug/dscm (corrected to seven percent oxygen) or 85 percent removal, whichever is less stringent. However, the average of annual stack tests on each incinerator at the facility must be in compliance with the federal limit of 80 ug/dscm (corrected to seven percent oxygen) or 85 percent removal, whichever is less stringent. Four years after the effective date of this Subpart (30 September 2002) the averaging of the annual stack tests across all incinerators at the facility will end and each of the</p> |

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| <p><b>AE.40.2.NY.</b> New or modified municipal or private solid waste incinerators must meet design requirements (6 NYCRR 219-2.3, 219-2.4(b)) [Revised January 1999].</p> | <p>facility's incinerators must be in compliance with the emission limit of 28 ug/dscm (corrected to seven percent oxygen) or 85 percent removal, whichever is less stringent. Emission control devices must be kept in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such devices effectively.)</p> <p>(NOTE: See AE.40.1.NY. for applicability.)</p> <p>Verify that the furnace design provides for a residence time for combustion gas of at least 1 s at no less than 1800 °F.</p> <p>Verify that the furnace design includes auxiliary burners capable of demonstrating, by a method specific to the proposed incinerator and acceptable to the Commissioner, that actual measurements indicate a temperature and residence time of at least 1800 °F for 1 s in the combustion zone on a continuous basis, or equivalent, based on a continuous 30-min average of temperature measurements.</p> <p>Verify that the furnace design includes control equipment for reducing emissions of HCl, designed such that the flue gas temperature at the outlet from the control device does not exceed 300 °F unless a demonstration is made that an equivalent collection of condensible heavy metals and toxic organics can be achieved at a higher outlet temperature or through the use of alternate technologies.</p> |
| <p><b>AE.40.3.NY.</b> New or modified municipal or private solid waste incinerators must meet operating requirements (6 NYCRR 219-2.4(a) through (e)).</p>                  | <p>(NOTE: See AE.40.1.NY. for applicability.)</p> <p>Verify that solid waste incinerators maintain a combustion index of 99.9 percent based on a running 8-h average of readings, and 99.95 percent, based on a running 7-day average of readings.</p> <p>(NOTE: On a case-by-case basis, alternative combustion index criteria may be established for any source unable to meet the combustion index criteria.)</p> <p>Verify that the facility demonstrates, by a facility-specific method, that actual measurements indicate a temperature and residence time of at least 1800 °F for 1 s in the combustion zone on a continuous basis, or equivalent.</p> <p>(NOTE: The demonstration must be based on a continuous 30-min average of temperature measurements.)</p> <p>Verify that solid waste incinerators emissions to the outdoor atmosphere do not have a 6-min average opacity of 10 percent or greater.</p> <p>Verify that auxiliary burners are operated as necessary to comply with the temperature and residence time requirement at the following times:</p>  |

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| <p><b>AE.40.4.NY.</b> New or modified municipal or private solid waste incinerators must conduct emissions tests and report results to the Commissioner (6 NYCRR 219-2.6) [Revised January 1999].</p> | <ul style="list-style-type: none"> <li>- furnace start-up prior to introduction of municipal solid waste</li> <li>- furnace shutdown when municipal solid waste feed has been discontinued until complete burn out in the furnace has occurred</li> <li>- when processing marginally combustible waste, during periods of malfunction, or any other time when the temperature and residence time requirements cannot otherwise be met, unless such operation is approved in accordance with the approved plan for start-up, shutdown, and upset conditions</li> <li>- at such other times as determined to be appropriate by the Commissioner.</li> </ul> <p>Verify that control equipment for reducing emissions of hydrogen chloride is operated such that the flue gas temperature at the outlet from the control device does not exceed 300 °F unless a demonstration is made that an equivalent collection of condensible heavy metals and toxic organics can be achieved at a higher outlet temperature or through the use of alternate technologies.</p> <p>(NOTE: See AE.40.1.NY. for applicability.)</p> <p>Verify that solid waste incinerators comply with the following emission test schedule:</p> <ul style="list-style-type: none"> <li>- once within 60 days after achieving the maximum production rate at which the affected unit will be operated, but not later than 180 days after first receipt of municipal solid waste at the affected incinerator</li> <li>- once after 12 mo, but within 18 mo of such receipt</li> <li>- once after 30 mo, but within 36 mo of such receipt</li> <li>- once after 48 mo, but within 54 mo of such receipt</li> <li>- subsequently as determined necessary by the Commissioner (in no event will the interval between such subsequent tests exceed 5 yr).</li> </ul> <p>Verify that a preliminary emission test protocol is submitted to the Commissioner at least 180 days prior to emission testing, and a final emission test protocol is submitted at least 90 days prior to such testing.</p> <p>Verify that all emission tests are witnessed by a representative of the Department.</p> <p>(NOTE: Results of any emission test done either in the absence of an approved protocol, or which is not witnessed, will not be accepted.)</p> <p>Verify that copies of emission test results and a report summarizing the results of emission testing and associated ambient air impacts are submitted to the Commissioner and other agencies (see next paragraph) within 120 days after completion of the tests.</p> <p>Verify that test protocols, reports and notification are submitted to the Commissioner as follows:</p> <ul style="list-style-type: none"> <li>- one copy to the Division of Air Resources, New York State Department of</li> </ul> |

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| <p><b>AE.40.5.NY.</b> New or modified municipal or private solid waste incinerators must continuously monitor emissions (6 NYCRR 219-2.7(a) and (b)).</p>                                   | <p>Environmental Conservation, 50 Wolf Road, Albany, New York 12233</p> <ul style="list-style-type: none"> <li>- one copy to the Regional Air Pollution Control Engineer at the appropriate regional office of the Department</li> <li>- copies to the appropriate county health Department, county environmental quality agency, and other governmental agencies as required by the Commissioner.</li> </ul> <p>Verify that air emission tests are performed for particulates; CO; CO<sub>2</sub>; oxygen; SO<sub>2</sub>; NO<sub>2</sub>; HCl and trace contaminants including, but not limited to, heavy metals (arsenic, beryllium, cadmium, total chromium, hexavalent chromium, copper, lead, mercury, nickel, zinc), polychlorinated dibenzo-p-dioxins, polychlorinated dibenzo furans, total polycyclic aromatic hydrocarbons (PAH), formaldehyde, and polychlorinated biphenyls (PCBs).</p> <p>(NOTE: Testing of congeners of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo furans may be required by the Commissioner. The Commissioner may add or delete contaminants from this list for good cause.)</p> <p>(NOTE: See AE.40.1.NY. for applicability.)</p> <p>Verify that solid waste incinerators install and operate instruments for continuously monitoring the following emission and operating parameters:</p> <ul style="list-style-type: none"> <li>- opacity</li> <li>- SO<sub>2</sub></li> <li>- hydrogen chloride</li> <li>- NO<sub>x</sub></li> <li>- CO</li> <li>- CO<sub>2</sub></li> <li>- oxygen</li> <li>- temperature and</li> <li>- combustion index.</li> </ul> <p>(NOTE: The requirement for HCl monitoring may be waived upon a satisfactory demonstration by the applicant that HCl cannot be monitored reliably at the incinerator and provided that an alternative monitoring procedure acceptable to the Commissioner is implemented. Final determination of reliability will be made by the Commissioner.)</p> |
| <p><b>AE.40.6.NY.</b> New or modified municipal or private solid waste incinerators must meet specific recordkeeping and reporting requirements (6 NYCRR 219-2.7(c), (d), (e) and (f)).</p> | <p>(NOTE: See AE.40.1.NY. for applicability.)</p> <p>Verify that a report indicating continuous emission monitoring equipment locations, as well as specifications, and procedures for calibration, operation, maintenance, and data evaluation and reporting is submitted to the Commissioner at least 90 days prior to installation of such equipment.</p> <p>Verify that the report is approved by the Commissioner prior to equipment</p>  |

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|  | <p>installation.</p> <p>Verify that the report is distributed as follows:</p> <ul style="list-style-type: none"> <li>- one copy to the Division of Air Resources, New York State Department of Environmental Conservation, 50 Wolf Road, Albany, New York 12233</li> <li>- one copy to the Regional Air Pollution Control Engineer at the appropriate regional office of the Department</li> <li>- copies to the appropriate county health Department, county environmental quality agency, and other governmental agencies as required by the Commissioner.</li> </ul> <p>Verify that a file is maintained which includes the following:</p> <ul style="list-style-type: none"> <li>- a quarterly tabulation and summary of emission and operating parameter measurements for the incinerator</li> <li>- the following operating parameters, recorded during the preceding 3 mo: <ul style="list-style-type: none"> <li>- steam temperature in degrees Fahrenheit, steam pressure lb/in<sup>2</sup> absolute and steam flow in pounds per h (hourly average)</li> <li>- hourly auxiliary fuel use per furnace in gal/hr for fuel oil and ft<sup>3</sup>/hr for gaseous fuel</li> </ul> </li> <li>- for electrostatic precipitators: <ul style="list-style-type: none"> <li>- current flow per field in amperes</li> <li>- applied voltage per field</li> <li>- sparking rate per field</li> <li>- hourly average temperature at both inlet and outlet of the device in degrees Fahrenheit,</li> <li>- frequency and duration of maintenance or cleaning periods when the precipitator is not fully operational</li> </ul> </li> <li>- for fabric filters: <ul style="list-style-type: none"> <li>- hourly average pressure drop across each module and also across the inlet and outlet of the entire device in inches of water</li> <li>- number of compartments in use, hourly</li> <li>- hourly average temperature at both inlet and outlet of the device in degrees Fahrenheit</li> <li>- frequency and duration of maintenance or cleaning periods when the fabric filter is not fully operational</li> </ul> </li> <li>- for gaseous contaminant emission control devices: <ul style="list-style-type: none"> <li>- hourly average pressure drop across device in inches of water</li> <li>- hourly average temperature at both inlet and outlet of the device in degrees Fahrenheit</li> <li>- reagent chemicals used in pounds per h by chemical</li> <li>- water use in gal per hour</li> <li>- frequency, duration, and description of periods when the device is not fully operational.</li> </ul> </li> </ul> <p>Verify that quarterly summary of emissions and operating parameters are submitted to the addressees listed above within 30 days of the end of each calendar quarter.</p> |



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| <p><b>AE.40.7.NY.</b> New or modified municipal or private solid waste incinerators must report excess emissions and noncompliance (6 NYCRR 219-2.7(g)).</p> <p><b>AE.40.8.NY.</b> Operators of new or modified municipal or private solid waste incinerators must be trained (6 NYCRR 219-2.8)</p> | <p>Verify that records are kept for 3 yr, and made available upon request of the Commissioner or his representative within ten working days from receipt of the request.</p> <p>(NOTE: See AE.40.1.NY. for applicability.)</p> <p>Verify that excess emissions and/or out of compliance operating parameters are reported to the appropriate regional air pollution control engineer within 1 working day of occurrence, along with a program for immediate correction of these conditions.</p> <p>(NOTE: See AE.40.1.NY. for applicability.)</p> <p>Verify that the incinerator is, at all times, operated under the direction of properly trained individuals.</p> <p>Verify that a description of an operator training program is submitted to the Commissioner that includes the following:</p> <ul style="list-style-type: none"> <li>- proper operation and maintenance of equipment</li> <li>- knowledge of environmental permit conditions and the impact of plant operations on emissions</li> <li>- interfacing with the public on the impact of plant operation on environmental concerns.</li> </ul> <p>Verify that the onsite operation is directed at all times by a person(s) possessing an appropriate current New York State Municipal Solid Waste Incinerator Operator Certification.</p> <p>(NOTE: Operation includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>- fuel preparation, storage, charging combustion, heat extraction, combustion gas treatment</li> <li>- proper functioning of all mechanical and/or environmental control and monitoring equipment.)</li> </ul> <p>(NOTE: This requirement does not eliminate the need for any person(s) involved with the incinerator from having to obtain any other required certificate(s) of license(s) necessary for the performance of their specific duties.)</p> |

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| <b>AE.55.</b><br><br><b>GASOLINE/FUELS</b>                                       |        |  |
| <b>AE.55.1.NY.</b><br>January 1999].   | [Moved | (NOTE: This checklist item moved to ST.15.1.NY.) |
| <b>AE.55.2.NY.</b><br>January 1999].   | [Moved | (NOTE: This checklist item moved to ST.15.2.NY.) |
| <b>AE.55.3.NY.</b><br>January 1999].   | [Moved | (NOTE: This checklist item moved to ST.15.3.NY.) |
| <b>AE.55.4.NY.</b><br>January 1999].   | [Moved | (NOTE: This checklist item moved to ST.15.4.NY.) |
| <b>AE.55.5.NY.</b><br>January 1999].   | [Moved | (NOTE: This checklist item moved to ST.15.5.NY.) |
| <b>AE.55.6.NY.</b><br>January 1999].   | [Moved | (NOTE: This checklist item moved to ST.15.6.NY.) |
| <b>AE.55.7.NY.</b><br>January 1999].   | [Moved | (NOTE: This checklist item moved to ST.15.7.NY.) |
| <b>AE.55.8.NY.</b><br>January 1999].   | [Moved | (NOTE: This checklist item moved to ST.15.8.NY.) |
| <b>AE.55.9.NY.</b><br>January 1999].   | [Moved | (NOTE: This checklist item moved to ST.15.9.NY.) |

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| <b>AE.55.10.NY.</b> [Moved January 1999].   | <p>(NOTE: This checklist item moved to ST.15.10.NY.)</p>  |
| <b>AE.55.11.NY.</b> Gasoline must meet Reid vapor pressure (RVP) limits (6 NYCRR 225-3.3) [Revised March 2003].                                     | <p>Verify that no person sells or supplies a gasoline to a retailer or wholesale purchaser-consumer, with a Reid vapor pressure (RVP) greater than 9.0 pounds per square inch (psi) (as sampled and tested by methods acceptable to the commissioner), during the period May 1st through September 15th of each year beginning 1989.</p> <p>(NOTE: A carbon monoxide contingency measure may be invoked in the New York City CMSA.)</p>   |
| <b>AE.55.12.NY.</b> Gasoline distributors and consumer must meet recordkeeping requirements (6 NYCRR 225-3.4(b), (c) and (d)) [Revised March 2003]. | <p>Verify that each retailer or wholesale purchaser-consumer maintains records on each delivery of gasoline.</p> <p>Verify that the records include the following:</p> <ul style="list-style-type: none"> <li>- the certification that the gasoline conforms with all RVP requirements and all applicable with all state and Federal regulations</li> <li>- documentation of the maximum RVP of the gasoline</li> <li>- designation of the appropriate time period(s) in which the gasoline is intended to be dispensed to motor vehicles</li> <li>- documentation of the shipment quantity and the shipment date of the gasoline being distributed.</li> </ul> <p>Verify that distributors, retailer, and wholesale consumers make records available for inspection during normal business hours, at the location from which the gasoline was delivered, sold, or dispensed.</p> <p>Verify that all records and documentation required to be made or maintained, including any calculations performed, are kept for least 2 years from date of delivery.</p> |
| <b>AE.55.13.NY.</b> [Deleted March 2003].   | <p>[6 NYCRR 225-3.7 repealed.]</p>  |
| <b>AE.55.14.NY.</b> Fuels must meet sulfur content limitations (6 NYCRR 225-1.2(a), (b) and (g)) [Revised   | <p>Verify that no fuel is used that contains sulfur in a quantity exceeding the following limitations:</p> <ul style="list-style-type: none"> <li>- oil with 0.75 percent sulfur by weight or coal with 0.60 lb sulfur/MBtu gross</li> </ul>  |

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| <p>January 2002].</p> <p><b>AE.55.15.NY.</b> Waste fuel must not be burned unless it meets specific conditions (6 NYCRR 225-2.3).</p> | <p>heat content, where such oil or coal is for use in any stationary combustion installation with a total heat input greater than 250 MBtu/h, if the installation is located outside of New York City, Nassau, Rockland, or Westchester Counties</p> <ul style="list-style-type: none"> <li>- sulfur-in-fuel limitations specified in Appendix 1-13.</li> </ul> <p>Verify that, if changing from the use of fuel oil or gas to coal, the sulfur content of the coal does not exceed the sulfur-in-fuel limitations specified in Appendix 1-13.</p> <p>(NOTE: If two or more furnaces are connected to a common air cleaning device and/ or stack, the total heat input for such stationary combustion source is the sum of the total heat input of all furnaces which are operated simultaneously and connected to the common air cleaning device and/or stack.)</p> <p>Verify that no stationary internal combustion engine that may be used as a centrally dispatched emergency power generating unit is refueled with distillate oil having a sulfur content which exceeds 30 parts per million by weight.</p> <p>Verify that waste fuel A is not burned in any stationary combustion installation, incinerator or process.</p> <p>(NOTE: The following emission sources located outside New York County may be excepted from this prohibition subject to the following conditions:</p> <ul style="list-style-type: none"> <li>- stationary combustion installation, by including special conditions in the applicable permit/certificate, after written application by the owner or operator is submitted to the Commissioner. As a minimum, the following conditions must be met for an exception to be granted: <ul style="list-style-type: none"> <li>- the maximum operating heat input is 20 MBtu/h or greater</li> <li>- the combustion efficiency of the installation is demonstrated to the Commissioner to be at least 99 percent while burning waste fuel A</li> </ul> </li> <li>- incinerator, by including special conditions in the applicable permit/certificate, after written application by the owner or operator is submitted to the Commissioner. As a minimum, the following conditions must be met for an exception to be considered: <ul style="list-style-type: none"> <li>- the furnace capacity exceeds 2000 lb/h of refuse charged and will burn Type 0, 1, 2, 3, or 4 refuse</li> <li>- the combustion efficiency is demonstrated to the Commissioner to be at least 99 percent while burning waste fuel A</li> </ul> </li> <li>- process, by including special conditions in the applicable permit/certificate, after written application by the owner or operator is submitted to the Commissioner.)</li> </ul> <p>(NOTE: As a minimum, the following condition must be met for an exception to be considered: the combustion efficiency is demonstrated to the Department to be at least 99 percent while burning waste fuel A.)</p> |

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| <b>AE.55.16.NY.</b> Burning of waste fuel A or waste fuel B requires a permit (6 NYCRR 225-2.4 and 225-2.5(b)). | <p>Verify that neither waste fuel A or waste fuel B is burned unless without a permit or certificate from the Commissioner.</p> <p>(NOTE: Waste oil may be burned as follows:</p> <ul style="list-style-type: none"> <li>- in space heaters located in automotive service facilities, when:             <ul style="list-style-type: none"> <li>- the maximum operating heat input is less than 1 MBtu/h</li> <li>- waste oil is generated onsite</li> <li>- the waste oil to be burned contains no chemical waste</li> </ul> </li> <li>- in mobile emission sources when the waste oil is generated in the same emission source.)</li> </ul> |
| <b>AE.55.17.NY.</b> [Deleted March 2005].   | <p>(NOTE: Deleted because Part 239 applies to any person who sells, supplies, offers for sale, or manufactures for sale in the State of New York portable fuel container(s) or spout(s) or both portable fuel container(s) and spout(s) for use in the State of New York.)</p>   |

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| <b>AE.60.</b><br><br><b>PRINTING PRESSES AND GRAPHIC ARTS</b><br><br><b>AE.60.1.NY.</b> Graphic arts operations must meet opacity standards (6 NYCRR 234.19h and 234.3(e)) [Added January 1998; Citation Revised March 2004].<br><br><b>AE.60.2.NY.</b> Packaging rotogravure, publication rotogravure, and flexographic printing processes must meet VOC standards (6 NYCRR 234.3(a)) [Revised January 1998].<br><br><b>AE.60.3.NY.</b> Offset lithographic printing processes must meet VOC standards (6 NYCRR | <br><br><br>(NOTE: These requirements do not apply to:<br>- conductive inks which are applied at screen printing processes in the production of electronic circuits that permit electric current flow through the printed line or pattern<br>- sterilization indicating inks which are applied at screen printing processes used to monitor the sterilization of medical instruments, autoclave efficiency, and the thermal processing of foods for the prevention of spoilage<br>- inks which are applied by proof presses<br>- low-use specialty inks and/or coatings where the plant wide total annual usage is equal to or less than 55 gal.)<br><br>Verify that no graphic arts operation causes or allows emissions to the outdoor atmosphere having an average opacity of 10 percent or greater for any consecutive 6 min period.<br><br><br>(NOTE: See AE.60.1.NY. for exemptions.)<br>Verify that packaging rotogravure, publication rotogravure, or flexographic printing process employing ink containing VOCs meets one of the following control strategies:<br>- the volatile fraction of ink, as it is applied to the substrate, contains 25.0 percent by volume or less of volatile organic compounds and 75.0 percent by volume or more of nonreactive volatiles<br>- the ink as it is applied to the substrate, less nonreactive volatiles, contains 60.0 percent by volume or more nonvolatile material<br>- the capture system and the air cleaning device provide for an overall reduction in volatile organic compound emissions of at least:<br>- 75.0 for publication rotogravure processes<br>- 65.0 percent for packaging rotogravure processes<br>- 60.0 percent for flexographic printing processes<br>- the overall removal efficiency is determined by testing the capture efficiency and the removal efficiency of the control equipment, utilizing test methods acceptable to the Commissioner.<br><br><br>(NOTE: See AE.60.1.NY. for exemptions.)<br>Verify that offset lithographic printing processes that employ fountain solutions |

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| 234.3(b)).  | <p>meet the following VOC requirements:</p> <ul style="list-style-type: none"> <li>- for sources in operation prior to 1 September 1988, the fountain solution contains no more than 15 percent by weight of VOCs</li> <li>- for sources in operation after 1 September 1988, the fountain solution contains no more than 10 percent by weight of VOCs.</li> </ul> <p>Verify that, where there are offset lithographic printing processes that employ fountain solutions containing VOC, an air cleaning device provides a reduction in VOC emissions from the dryer exhaust of at least 90 percent.</p>   |
| <b>AE.60.4.NY.</b> Screen printing processes must meet VOC standards (6 NYCRR 234.3(c) and 234.3(d)).   | <p>(NOTE: See AE.60.1.NY. for exemptions.)</p> <p>Verify that, unless control equipment is used, screen printing processes do not apply inks, coatings, or adhesives that exceed the following standards:</p> <ul style="list-style-type: none"> <li>- on paper, 3.3 lb VOC/gal, minus water and excluded VOC</li> <li>- on glass, 3.3 lb VOC/gal, minus water and excluded VOC</li> <li>- on metal, 3.3 lb VOC/gal, minus water and excluded VOC</li> <li>- on plastic/vinyl, 3.3 lb VOC/gal, minus water and excluded VOC</li> <li>- on reflective sheeting, 3.3 lb VOC/gal, minus water and excluded VOC</li> <li>- on textile/imprinted garments, 3.3 lb VOC/gal, minus water and excluded VOC</li> <li>- on serigraph/fine arts, 5.0 lb VOC/gal, minus water and excluded VOC</li> <li>- on pressure sensitive decals, 3.3 lb VOC/gal, minus water and excluded VOC</li> <li>- on plywood/wood, 3.3 lb VOC/gal, minus water and excluded VOC.</li> </ul> <p>Verify that emission control equipment used provides for at least an 80 percent overall removal efficiency of VOCs.</p> |
| <b>AE.60.5.NY.</b> Air cleaning devices used by graphic arts operations must meet continuous monitoring requirements (6 NYCRR 234.4(c)) [Added January 1998; Revised January 1999]. | <p>(NOTE: See AE.60.1.NY. for exemptions.)</p> <p>Verify that, if an air cleaning device is used, continuous monitors of the following parameters are installed, periodically calibrated, and operated at all times that the associated control equipment is operating:</p> <ul style="list-style-type: none"> <li>- exhaust gas temperature of all incinerators</li> <li>- temperature rise across catalytic incinerator bed</li> <li>- breakthrough of volatile organic compounds on a carbon adsorption unit</li> <li>- any other continuous monitoring or recording device required by the Commissioner.</li> </ul>  |
| <b>AE.60.6.NY.</b> Graphic arts operations must meet specific   | <p>(NOTE: See AE.60.1.NY. for exemptions.)</p>   |

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| requirements when using open containers to store or dispose of VOCs (6 NYCRR 234.6) [Revised January 1998]. | <p>Verify that graphic arts operations do not use open containers for the following:</p> <ul style="list-style-type: none"> <li>- to store or dispose of cloth or paper impregnated with VOC and/or solvents used for surface preparation, cleanup or coating removal</li> <li>- store spent or fresh VOC and/or solvents to be used for surface preparation, cleanup or coating removal</li> <li>- to store or dispose of inks and/or surface coatings, unless production, sampling, maintenance or inspection procedures require operational access.</li> </ul> <p>(NOTE: This prohibition does not apply to the actual device or equipment designed for the purpose of applying a coating material to a substrate.)</p> |



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| <p><b>AE.75.</b></p> <p><b>DRY CLEANING<br/>OPERATIONS</b></p> <p><b>AE.75.1.NY.</b> Perc dry cleaning facilities must comply with specific prohibitions (6 NYCRR 232.4) [Revised January 1998].</p> <p><b>AE.75.2.NY.</b> All new and existing perc dry cleaners must meet specific permit, registration, or termination requirements (6 NYCRR 232.15) [Added January 1998].</p> <p><b>AE.75.3.NY.</b> All new and existing perc dry cleaners must meet general requirements for vapor barriers and ventilation (6 NYCRR 232.5(a)) [Added January 1998].</p> | <p>Verify that dry-to-dry vented or non-vented equipment is not used as a transfer machine.</p> <p>Verify that self-service dry cleaning machines are not used.</p> <p>Verify that immersion heaters are not used to evaporate solvent from the untreated water effluent of solvent water separators.</p> <p>Verify that the venting of perc emissions from dry cleaning equipment or emission control devices into the workroom or facility is prohibited.</p> <p>Verify that new perc dry cleaning facilities have an approved permit before commencing construction or installation.</p> <p>Verify that existing perc dry cleaners that are in compliance with equipment standards are registered.</p> <p>Verify that notifications to terminate operation were submitted for any systems that will be replaced.</p> <p>Verify that existing facilities that were to be modified or replaced submitted registration applications.</p> <p>(NOTE: Perc dry cleaning facilities that are major stationary sources must comply with all requirements under 6 NYCRR 201 (see AE.5.6.NY through AE.5.11.NY with regard to obtaining a Title V facility permit.)</p> <p>Verify that stand-alone dry cleaning facilities that are designated as major sources, pursuant to the National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities under 40 CFR 63 Subpart M, and that have transfer type machines are contained inside a room that meets the following requirements:</p> <ul style="list-style-type: none"> <li>- constructed of materials impermeable to perc</li> <li>- designed and operated to maintain a negative pressure at each opening at all times that the machine is operating.</li> </ul> <p>Verify that the dry-cleaner operator notifies the Department by mail within 30 days of installation of the required vapor barrier and general exhaust ventilation</p> |

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| <p><b>AE.75.4.NY.</b> Vapor barriers for perc dry-cleaners must meet specific requirements (6 NYCRR 232.6(a)(1)) [Added January 1998].</p>                             | <p>system and certifies that it meets all regulatory requirements.</p> <p>(NOTE: The notification must be sent by certified mail to the appropriate Regional Office of the Department addressed to the Department of Environmental Conservation, Attention: Regional Air Pollution Control Engineer.)</p> <p>Verify that vapor barriers, at a minimum, enclose the dry cleaning equipment.</p> <p>Verify that vapor barriers are constructed of polyvinyl chloride, PVC sheet 22 mil thick (0.022 in.), sheet metal, metal foil face composite board, or other equivalent materials that are impermeable to perc vapors.</p> <p>Verify that vapor barriers are constructed so that all joints and seams are sealed except for inlet make-up air and exhaust openings and entry doors.</p> <p>Verify that entry doors are open only when a person is entering or exiting the room enclosure.</p> |
| <p><b>AE.75.5.NY.</b> General exhaust ventilation systems for perc dry-cleaners must meet specific requirements (6 NYCRR 232.6(a)(2)) [Added January 1998].</p>        | <p>Verify that dry cleaning facilities that are co-located are equipped with a vapor barrier and with a general exhaust ventilation system that is completely separate from the ventilation system(s) serving other areas of the building.</p> <p>Verify that the general exhaust ventilation system is located near the dry cleaning machinery or connected to a separate room enclosure with a vapor barrier exhausting emissions to the outer air.</p> <p>Verify that the dry cleaning general exhaust ventilation system are operated at all times when the dry cleaning machine(s) is in operation, and during maintenance operations and is capable of at least one air change per 5 min.</p>   |
| <p><b>AE.75.6.NY.</b> Door fan/local exhaust ventilation systems for perc dry-cleaners must meet specific requirements (6 NYCRR 232.6(a)(3)) [Added January 1998].</p> | <p>Verify that all first, second and third generation dry cleaning equipment is equipped with a door fan/local exhaust ventilation system including a mechanical exhaust fan that is activated when the loading door is open, drawing air from the machine drum causing fresh air to be drawn in through the loading door.</p> <p>Verify that a minimum inward air velocity of 100 fpm, is maintained through the effective door opening area of the loading door of the machine.</p> <p>Verify that the door fan/local exhaust ventilation systems do not recirculate vapors into the workroom and is properly vented to the outer air.</p> <p>Verify that the door fan/local exhaust ventilation emissions are controlled to a design emission standard of 5 ppm perc with an in-use maximum compliance</p>   |

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| <p><b>AE.75.7.NY.</b> Process ventilation systems for perc dry-cleaners must meet specific interim standards (6 NYCRR 232.6(a)(4)) [Added January 1998].</p>   | <p>standard of 20 ppm.</p> <p>Verify that process ventilation emission points on first and second generation machines that exhaust during the aeration cycle and when the machine door is open are vented to the outer air above the roof and more than 25 ft from all openings in nearby occupancies.</p> <p>(NOTE: Process ventilation emissions from existing first and second generation vented machines having emission controls as part of the original equipment or retrofitted to comply with the 100 ppm perc emission standard effective 10 May 1981 must continue to meet this standard until such time as retrofitting, replacement, or shutdown is required.)</p> <p>Verify that process ventilation emissions from existing second generation machines that are retrofitted with control equipment to comply with interim standards achieve a perc concentration of five ppm or less in the exhaust and achieve an in-use compliance standard of less than 20 ppm perc in the exhaust.</p> <p>Verify that the exhaust damper of a vented first or second generation machine is completely closed when the machine is not being vented, and does not leak vapors into the workroom or the outer air.</p>  |
| <p><b>AE.75.8.NY.</b> Refrigerated condensers or equivalent closed-loop vapor recovery systems for perc dry-cleaners must meet specific requirements (6 NYCRR 232.6(a)(5)) [Added January 1998].</p> | <p>Verify that refrigerated condensers are capable of achieving an outlet vapor temperature downstream of any by-pass of the condenser less than or equal to 45°F (7.2°C) during the final cool down cycle, and achieve a concentration of 8600 ppm or less perc in the drum upon completion of the drying cycle.</p> <p>Verify that refrigerated condensers have a graduated thermometer, thermocouple or equivalent instrument with a minimum range from 0°F (-18°C) to 150°F (66°C), that measures the temperature of the outlet vapor stream downstream of any by-pass of the condenser, and is easily visible to the operator.</p> <p>Verify that new third and fourth generation equipment with refrigerated condenser control systems are equipped with a drying sensor/controller that extends the drying time at least four minutes beyond the point that the solvent recovery rate is less than 40 ml/min or solvent vapor concentration in the drum is less than 8600 ppm perc.</p> <p>Verify that the refrigerated condenser is operated with a diverter valve.</p> <p>Verify that equivalent closed-loop vapor recovery systems or other control device uses a technology that has been demonstrated to achieve at least 90 percent by weight emission reduction based upon the amount of perc entering and leaving the control device.</p> |

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| <p><b>AE.75.9.NY.</b> Secondary emission control systems for perc dry-cleaners must meet specific requirements (6 NYCRR 232.6(a)(6)) [Added January 1998].</p> | <p>Verify that the secondary control system is designed to function with a primary control system complying with all requirements for third generation equipment.</p> <p>Verify that the secondary control system is capable of reducing the perc concentration in the drum from 8600 ppm or greater to 300 ppm.</p> <p>Verify that any integral carbon adsorber used as a secondary control system is sized correctly for the machine and be capable of reducing the perc concentration in the drum from 8,600 ppm or greater to 300 ppm or less.</p> <p>Verify that the integral carbon adsorber is designed for non-contact steam or hot air stripping operation, and is stripped or desorbed in accordance with manufacturer's instructions or at least weekly, whichever is more stringent.</p> |
| <p><b>AE.75.10.NY.</b> Spill containment systems for perc dry-cleaners must meet specific requirements (6 NYCRR 232.6(a)(7)) [Added January 1998].</p>         | <p>Verify that all new third and fourth generation, or used, reinstalled dry cleaning equipment are equipped with a spill containment system capable of containing 125 percent of the capacity of the largest dry cleaning perc tank or vessel associated with the dry cleaning machine.</p>   |
| <p><b>AE.75.11.NY.</b> The relocation of ventilation emissions points must meet specific standards (6 NYCRR 232.5(b)) [Added January 1998].</p>                | <p>Verify that the relocation of process ventilation emission points to the outdoor atmosphere complies with the retrofitting requirements found in Appendix 1-14.</p>   |
| <p><b>AE.75.12.NY.</b> Perc dry-cleaners must meet specific leak inspection requirements (6 NYCRR 232.7(a) through (f)) [Added January 1998].</p>              | <p>Verify that inspections are done by the trainer operator or his designee.</p> <p>Verify that all inspections are recorded on a checklist supplied by the Department and the checklists are kept for at least 5 yr from the date of inspection.</p> <p>Verify that the dry cleaning system is thoroughly inspected, at least weekly, for vapor leaks using one of the following devices or methods for detecting vapor leaks:</p> <ul style="list-style-type: none"> <li>- a halogenated-hydrocarbon detector</li> <li>- a portable gas analyzer</li> <li>- an air sampling pump and colorimetric tube</li> <li>- an alternative method approved by the Department.</li> </ul>   |

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| <p><b>AE.75.13.NY.</b> Perc dry cleaners leaks, malfunctions, and emissions must be noted, repaired, and reported when necessary (6 NYCRR 232.7(g) through (i)) [Added January 1998].</p> | <p>Verify that all of the above equipment is properly calibrated.</p> <p>Verify that the following components of the dry cleaning system are inspected weekly for perceptible liquid and vapor leaks and for proper operation while the dry cleaning system is operating:</p> <ul style="list-style-type: none"> <li>- hose and pipe connections, fittings, couplings and valves</li> <li>- door gaskets and seatings</li> <li>- filter gaskets and seatings</li> <li>- pumps</li> <li>- solvent (including spent solvent) tanks and containers</li> <li>- water separators</li> <li>- muck cookers</li> <li>- stills</li> <li>- exhaust dampers</li> <li>- diverter valves</li> <li>- cartridge filter housings.</li> </ul> <p>Verify that carbon adsorber vents are tested weekly using colorimetric detector tubes or portable halogen detectors.</p> <p>Verify that the temperature of the vapor stream on the inlet and outlet side of a refrigerated condenser is measured weekly.</p> <p>Verify that preparedness and prevention equipment and conditions are inspected weekly to ensure proper operation and maintenance.</p> <p>Verify that the inward air velocity for a loading door fan is checked weekly with a portable velometer or equivalent measurement instrument.</p> <p>(NOTE: A fugitive emission concentration of 50 ppm of perc emanating from any part of the dry cleaning system is a violation; except for short-term maintenance operations involving the opening of dry cleaning system components for inspection or repair.)</p> <p>Verify that any liquid leak, vapor leak, or malfunction that has been detected by the operator is noted on the checklist and, if at all possible, repaired immediately.</p> <p>Verify that, if the leak cannot be repaired at the time of detection, the leaking component is physically marked or tagged in a manner that is readily observable by an inspector and is repaired within 24 hr of detection, unless repair parts are unavailable.</p> <p>Verify that, if repair parts are not available at the facility, the parts are ordered within two working days of detecting such a leak and are installed within five working days after receipt.</p> <p>Verify that equipment with a leak that has not been repaired by the end of the 15th</p> |

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|   | <p>working day after detection is not operated until the leak is repaired, unless the facility owner or operator receives a leak-repair extension from the Department.</p> <p>(NOTE: An extension may be granted verbally, but will be followed up by a written confirmation within three days.)</p> <p>Verify that when a repair is completed, the completion date is recorded on the checklist.</p> <p>Verify that where a hazard is imminent or has already occurred, remedial action is taken immediately.</p> <p>Verify that all uncontrollable releases, fires or explosions are reported to the Department and appropriate emergency response agencies immediately.</p> <p>Verify that when any exceedance of the leak inspection requirements has been detected by the operator, it is noted on the checklist and repaired/adjusted immediately.</p>  |
| <p><b>AE.75.14.NY.</b> Perc dry cleaners must meet general operating and maintenance requirements (6 NYCRR 232.8(a) through (c) and (d)(8)) [Added January 1998].</p> | <p>Verify that all parts of the dry cleaning system including solvent containers where perc may be emitted to the atmosphere are kept closed at all times except when access is required for proper operation and maintenance.</p> <p>Verify that cleaning facilities are maintained and operated to minimize the release of perc to the environment.</p> <p>Verify that, where operations are not specifically addressed, the components are operated and maintained in accordance with the manufacturer's recommendations.</p> <p>Verify that the facility operator retains, on-site, a copy of the design specifications and the operating manuals for each dry cleaning system and each emission control device located at the dry cleaning facility.</p> <p>Verify that each operation and maintenance function and the date performed are recorded on the Department supplied checklist.</p> <p>Verify that checklists are maintained on-site for at least 5 yr from the date of the checklist.</p> |
| <p><b>AE.75.15.NY.</b> Perc dry cleaners must meet manufacturer's specifications for specific equipment (6 NYCRR 232.8(d)(6)) [Added January 1998].</p>               | <p>Verify that the following equipment is maintained as recommended by manufacturer's specifications:</p> <ul style="list-style-type: none"> <li>- hose and pipe connections, fittings, couplings, and valves</li> <li>- door gaskets and seatings</li> <li>- filter gaskets and seatings</li> <li>- pumps</li> </ul>   |

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| <p><b>AE.75.16.NY.</b> Perc dry cleaners must specific preparedness and prevention requirements (6 NYCRR 232.8 (d)(7)) [Added January 1998].</p>                              | <ul style="list-style-type: none"> <li>- water separators</li> <li>- muck cookers</li> <li>- stills</li> <li>- exhaust dampers</li> <li>- diverter valves</li> <li>- cartridge filter housings</li> <li>- drying sensors.</li> </ul> <p>Verify that all dry cleaning operations are equipped with the following:</p> <ul style="list-style-type: none"> <li>- adequate spill control equipment including sorbent materials, or alternative method for absorbing spills</li> <li>- vapor-proof containers for storing spill-contaminated material</li> <li>- fire control equipment.</li> </ul> <p>Verify that aisle space is maintained to allow proper inspection of the dry cleaning equipment.</p> <p>Verify that a reasonable supply of spare parts for repairing dry cleaning equipment is available at the dry cleaning facility.</p>   |
| <p><b>AE.75.17.NY.</b> Fourth generation perc dry cleaning machines must meet specific operating and maintenance requirements (6 NYCRR 232.8(d)(1)) [Added January 1998].</p> | <p>Verify that refrigerated condensers are operated in accordance with manufacturer's specifications and meet the following requirements:</p> <ul style="list-style-type: none"> <li>- the integral refrigerated condensers are operated to ensure that exhaust gases are recirculated until the air-vapor stream temperature is 45°F or less at the outlet</li> <li>- the difference between the temperature of the air-perc gas vapor stream entering and exiting the refrigerated condenser is greater than or equal to 20°F (11.1°C)</li> <li>- the temperature differential is determined at least weekly with a thermometer with a temperature range of from 32°F (0°C) to 120°F (48.9°C) to an accuracy of ± 2°F (1.1°C).</li> </ul> <p>Verify that adsorbers used with a primary control system or secondary control systems are operated to ensure that exhaust gases are recirculated at the temperature specified for optimum adsorption.</p> <p>Verify that cartridge filters and adsorptive cartridge filters are handled using one of the following methods:</p> <ul style="list-style-type: none"> <li>- dried, stripped, sparged, or otherwise treated, within the sealed filter housing, to reduce the volume of perc contained in the filter</li> <li>- drained in the filter housing, before disposal, for no less than 24 hr for cartridge filters and 48 hr for adsorptive cartridge filters.</li> </ul> |

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| <b>AE.75.18.NY.</b> Third generation perc dry cleaning machines must meet specific operating and maintenance requirements (6 NYCRR 232.8(d)(2)) [Added January 1998]. | <p>(NOTE: If, after draining, the filters are transferred to a separate device to further reduce the volume of perc, this treatment must be done in a system that routes any vapor to a primary closed-loop control system, with no exhaust to the atmosphere. In performing such a transfer the filter housing must be closed as soon as possible to minimize vapor leaks. The general exhaust ventilation system must be operated during this activity.)</p> <p>Verify that all steam and condensing coils are maintained free of lint and hard lint build-up on interior surfaces.</p> <p>Verify that for dry cleaning equipment equipped with a door fan, the operator uses a portable velometer or equivalent measurement instrument to verify that the required 100 fpm inward air velocity is maintained through the effective door opening when the loading door is open.</p> <p>Verify that for dry cleaning equipment equipped with a door fan, the inward air velocity is checked on a weekly basis.</p> <p>Verify that refrigerated condensers are operated in accordance with manufacturer's specifications and meet the following requirements:</p> <ul style="list-style-type: none"> <li>- the integral refrigerated condensers are operated to ensure that exhaust gases are recirculated until the air-vapor stream temperature is 45°F or less at the outlet</li> <li>- the difference between the temperature of the air-perc gas vapor stream entering and exiting the refrigerated condenser is greater than or equal to 20°F (11.1°C)</li> <li>- the temperature differential is determined at least weekly with a thermometer with a temperature range of from 32°F (0°C) to 120°F (48.9°C) to an accuracy of <math>\pm 2^\circ\text{F}</math> (1.1°C).</li> </ul> <p>Verify that vapor adsorbers when the machine has been retrofitted as a fourth generation machine is operated to ensure that exhaust gases are recirculated at the temperature specified for optimum adsorption.</p> <p>Verify that all water-cooled condensers include temperature gauges installed in the inlet and outlet water lines of the condensing coil on the dryer and the temperature difference is maintained according to manufacturer's specifications.</p> <p>Verify that azeotropic control devices are maintained and operated in accordance with manufacturer's instructions and specifications.</p> <p>Verify that cartridge filters and adsorptive cartridge filters are handled using one of the following methods:</p> <ul style="list-style-type: none"> <li>- dried, stripped, sparged, or otherwise treated, within the sealed filter housing, to reduce the volume of perc contained in the filter</li> <li>- drained in the filter housing, before disposal, for no less than 24 hr for</li> </ul> |



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| <p><b>AE.75.19.NY.</b> Second generation perc dry cleaning machines must meet specific operating and maintenance requirements (6 NYCRR 232.8(d)(3)) [Added January 1998].</p> | <p>cartridge filters and 48 hr for adsorptive cartridge filters.</p> <p>(NOTE: If, after draining, the filters are transferred to a separate device to further reduce the volume of perc, this treatment must be done in a system that routes any vapor to a primary closed-loop control system, with no exhaust to the atmosphere. In performing such a transfer the filter housing must be closed as soon as possible to minimize vapor leaks. The general exhaust ventilation system must be operated during this activity.)</p> <p>Verify that a vented machine operated with full-sized carbon adsorbers (dry-to-dry vented) that function during the drying cycle meets the following requirements:</p> <ul style="list-style-type: none"> <li>- desorption is performed at the frequency specified by the manufacturer or at a minimum frequency of each time all dry cleaning equipment exhausted to the device has cleaned a total of three pounds of articles for each pound of activated carbon, whichever is more stringent</li> <li>- desorption is performed with the minimum steam pressure and air flow capacity specified by the manufacturer</li> <li>- once desorption is complete, the carbon bed is fully dried according to the manufacturer's instructions</li> <li>- no perc vapors may bypass the carbon adsorber to the outdoor atmosphere at any time, nor be recirculated into the facility</li> <li>- the filter located in front of the carbon adsorber is checked and cleaned weekly.</li> </ul> <p>Verify that for dry cleaning equipment in mixed-use settings, the carbon adsorber vent is tested weekly using colorimetric detector tubes with results recorded on the checklist.</p> <p>Verify that for dry cleaning equipment in mixed-use settings, the carbon adsorber is stripped immediately when the carbon adsorber vent test results are five ppm or greater of perc.</p> <p>Verify that small external carbon adsorbers used for azeotropic control systems, are stripped at least weekly when in use or, if not in continuous daily use, adsorbers are stripped after they have been used for ten days.</p> <p>Verify that small external carbon adsorbers are vented to outside the building and do not recirculate vapor into the facility.</p> <p>Verify small external carbon adsorbers used in mixed-use settings are tested weekly using colorimetric detector tubes or equivalent measuring devices.</p> <p>Verify when small external carbon adsorbers used in mixed-use settings are tested, the results are recorded on the inspection checklist.</p> <p>Verify that for small external carbon adsorbers in mixed-use settings, the carbon adsorber is stripped immediately when the carbon adsorber vent test results are</p> |

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| <p><b>AE.75.20.NY.</b> First generation perc dry cleaning machines must meet specific operating and maintenance requirements (6 NYCRR 232.8(d)(4)) [Added January 1998].</p> <p><b>AE.75.21.NY.</b> Perc dry cleaning ancillary machines must meet specific operating and maintenance requirements (6 NYCRR 232.8(d)(5)) [Added January 1998].</p> | <p>five ppm or greater of perc.</p> <p>Verify that the exhaust damper of a vented machine is completely closed when the machine is not being vented and is repaired or replaced within five working days if malfunctioning.</p> <p>Verify that cartridge filters and adsorptive cartridge filters are handled using one of the following methods:</p> <ul style="list-style-type: none"> <li>- dried, stripped, sparged, or otherwise treated, within the sealed filter housing, to reduce the volume of perc contained in the filter</li> <li>- drained in the filter housing, before disposal, for no less than 24 h for cartridge filters and 48 h for adsorptive cartridge filters.</li> </ul> <p>(NOTE: If, after draining, the filters are transferred to a separate device to further reduce the volume of perc, this treatment must be done in a system that routes any vapor to a primary closed-loop control system, with no exhaust to the atmosphere. In performing such a transfer the filter housing must be closed as soon as possible to minimize vapor leaks. The general exhaust ventilation system must be operated during this activity.)</p> <p>Verify that all water-cooled condensers include temperature gauges installed in the inlet and outlet water lines of the condensing coil on the dryer and temperature difference are maintained according to manufacturer's specifications.</p> <p>Verify that azeotropic control devices are maintained and operated in accordance with manufacturer's instructions and specifications.</p> <p>Verify that an existing facility with a transfer machine operating a full-sized carbon adsorber or azeotropic control device, and cartridge filters meets the applicable requirements for second-generation machines.</p> <p>Verify that all filter muck is treated in a still or muck cooker which routes perc-contaminated vapors to a condenser or other control device and recycles condenser vapors into the machine.</p> <p>Verify that still or muck cooker emissions are not vented into the facility.</p> <p>Verify that any still or muck cooker is not operated in a manner that exceeds 75 percent of its capacity or other alternate value recommended by the manufacturer.</p> <p>Verify that any still or muck cooker is cooled to 100°F (38°C) or less before being</p> |

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| <p><b>AE.75.22.NY.</b> Perc-contaminated wastewater from dry-cleaners must meet specific requirements (6 NYCRR 232.5(h) and 232.9) [Added January 1998].</p> | <p>emptied or cleaned.</p> <p>Verify that button and lint traps are cleaned each working day and the lint is placed in a tightly sealed container.</p> <p>Verify that, whenever possible button and lint trap cleaning operations are performed so that the opening of such traps is done quickly with the local or general exhaust ventilation system operating to minimize perc emissions.</p> <p>Verify that carbon filtration units carbon cartridges are replaced according to a schedule as specified by the manufacturer to assure an effluent quality that does not exceed 20 ppb perc.</p> <p>Verify that perc contaminated wastewater evaporators are operated to ensure that no liquid perc or visible emulsion is allowed to vaporize.</p> <p>Verify that dip tanks and drying cabinets are exhausted to maintain an inward airflow, and be maintained under negative pressure, to ensure that fugitive emissions will be no greater than 50 ppm.</p> <p>Verify that vented emissions from dip tanks and drying cabinets do not exceed 20 ppm.</p> <p>Verify that perc-contaminated wastewater that is discharged to a sewer system is treated by physical separation (water separator) and double carbon filtration, or an equivalent control which has been approved by the Department, which has been properly designed to assure an effluent quality that:</p> <ul style="list-style-type: none"> <li>- is less than or equal to 20 ppb perc without perc evaporation</li> <li>- conforms to appropriate local sewer use ordinances.</li> </ul> <p>Verify that all perc-contaminated wastewater discharges to surface and groundwaters conforms to the requirements of Parts 652, and 750 through 758 of the New York Department of Environmental Conservation Rules and Regulations.</p> <p>Verify that perc-contaminated wastewater that is evaporated is treated by physical separation (water separator) and double carbon filtration prior to evaporation.</p> |
| <p><b>AE.75.23.NY.</b> Perc-contaminated wastes from dry-cleaners must meet specific requirements (6 NYCRR 232.10) [Added January 1998].</p>                 | <p>Verify that any perc-contaminated wastes generated are managed in accordance with all hazardous waste requirements.</p> <p>Verify that all perc-contaminated wastes (including spent cartridge filters, spent carbon, still bottoms, and lint) are stored in tightly sealed containers, which are impermeable to the solvent, so that no perc is emitted to the atmosphere.</p> <p>Verify that containers used to store perc-contaminated wastes are appropriately</p>   |

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| <p><b>AE.75.24.NY.</b> Perc-dry cleaning systems must meet emergency response requirements (6 NYCRR 232.11) [Added January 1998].</p>           | <p>labeled and stored in a designated area.</p> <p>Verify that containers used to store perc-contaminated wastes are in good condition and are kept closed except when necessary to add or remove waste.</p> <p>Verify that receipts or records showing the date and volume of hazardous waste shipments are retained for 5 yr.</p> <p>Verify that dry cleaning systems are operated and maintained to ensure that perc releases are contained and do not migrate to sewer systems or groundwater.</p> <p>Verify that for existing dry cleaning equipment:</p> <ul style="list-style-type: none"> <li>- floor drains and flooring in the vicinity of the equipment are sealed so as to be impermeable to spills, or</li> <li>- temporary dikes, berms and containment devices are placed in areas where spills are most likely to occur and procedures for preventing spill migration are established and followed.</li> </ul> <p>Verify that new dry cleaning equipment have installed the required spill containment system.</p> <p>Verify that, in the event of a perc release, the owner/operator or a designee takes all reasonable measures to ensure that the release is contained, including where applicable, stopping processes and operations, increasing room exhaust ventilation, collecting and containing released perc and removing and maintaining containers.</p> <p>Verify that, if the facility operator determines the facility has had an uncontainable release, fire or explosion the findings are reported to the Department and appropriate emergency response agencies immediately.</p> <p>Verify that any emergency response action is recorded and includes, at a minimum:</p> <ul style="list-style-type: none"> <li>- the date, duration and nature of any malfunction, spill or incident of the dry cleaning system</li> <li>- the notification procedures</li> <li>- the corrective actions taken.</li> </ul> |
| <p><b>AE.75.25.NY.</b> Perc-dry cleaning systems must meet recordkeeping requirements (6 NYCRR 232.12(a) through (f)) [Added January 1998].</p> | <p>Verify that operators of all dry cleaning facilities or their designees record the following:</p> <ul style="list-style-type: none"> <li>- the date, duration and nature of any malfunction, spill, incident, or emergency response at the facility</li> <li>- the date of maintenance on any air cleaning component or exhaust system</li> </ul>  |

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|  | <p>(such as the regeneration and/or replacement of the carbon in a carbon adsorber)</p> <ul style="list-style-type: none"> <li>- the number of loads between regenerations, cleaning and replacement of lint filters and carbon adsorber pre-filters, repair or replacement of exhaust fans</li> <li>- the amount of activated carbon in carbon adsorbers (dry weight in pounds)</li> <li>- the date of maintenance of drying sensors</li> <li>- the date and volume of hazardous waste shipments</li> <li>- the dates of perc-contaminated wastewater treatment unit carbon cartridge replacement.</li> </ul> <p>Verify that the owner/operator of a dry cleaning facility keeps receipts of perc purchases each month and a log of purchases and consumption on-site and available for request for a period of 5 yr.</p> <p>(NOTE: If no perc is purchased during a given month then the owner/operator would enter zero gal into the log.)</p> <p>Verify that the following calculation are performed on the first day of every month:</p> <ul style="list-style-type: none"> <li>- sum the volume of all perc purchases made in each of the previous twelve months</li> <li>- if no perc purchases were made in a given month, then the perc consumption for that month is zero gal</li> <li>- the total sum calculated is the yearly perc consumption at the facility.</li> </ul> <p>Verify that the following information is recorded on an inspection checklist:</p> <ul style="list-style-type: none"> <li>- the dates when the dry cleaning system components are inspected for perceptible leaks as specified under the inspection and testing requirements, and the name or location of dry cleaning system components where perceptible leaks are detected</li> <li>- the date, time and colorimetric detector tube monitoring results, if a carbon adsorber is used for primary or secondary emission control</li> <li>- the date, time and temperature sensor monitoring results for refrigerated condensers</li> <li>- the dates of repair and records of written or verbal orders for repair parts to demonstrate compliance with the inspection and testing requirements.</li> </ul> <p>Verify that copies of the required operation and maintenance checklists are retained onsite.</p> <p>Verify that a copy of design specifications and the operating manuals for each dry cleaning system and each emission control device located at the dry cleaning facility are maintained onsite.</p> <p>Verify that all records are maintained on-site for at least 5 yr and are made available to the Department upon written or verbal request.</p> |

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| <p><b>AE.75.26.NY.</b> Perc-dry cleaning systems must meet reporting requirements (6 NYCRR 232.12(g) and (h)) [Added January 1998].</p>        | <p>Verify that new facilities, or facilities installing new equipment, submit a compliance report within 30 days of commencing operation to certify compliance with the Federal NESHAP requirements.</p> <p>Verify that facilities exceeding the consumption thresholds identified in 40 CFR Section 63.320(d), (e), or (g) submit a compliance report, within 30 days of the 180 day compliance deadline, certifying compliance with any additional Federal requirements.</p> <p>Verify that compliance reports includes the following:</p> <ul style="list-style-type: none"> <li>- the name and address of the owner or operator</li> <li>- the address (that is, physical location) of the dry cleaning facility</li> <li>- an estimation of the annual perc consumption</li> <li>- a description of the machines' control devices</li> <li>- a statement verifying compliance with each applicable requirement under 40 CFR Sections 63.322, 63.323, and 63.324</li> <li>- a statement certifying that all information contained in the statement is accurate and true.</li> </ul> |
| <p><b>AE.75.27.NY.</b> Perc-dry cleaning systems must meet certification requirements (6 NYCRR 232.13(a)(2) and (h)) [Added January 1998].</p> | <p>Verify that any new closed-loop dry cleaning equipment that is installed in and used by a dry cleaning facility in New York State is certified by the Department.</p> <p>(NOTE: After the certified dry cleaning equipment has been installed at the user's facility, the manufacturer or manufacturer's representative must supply at least a two-day training session to the purchaser or lessee. The training must include instruction on how to maintain and operate the dry cleaning machine. This requirement does not apply to add-on door fan systems designed to capture drum vapors when the door is open.)</p>  |
| <p><b>AE.75.28.NY.</b> Perc-dry cleaning systems operators must meet certification requirements (6 NYCRR 232.14)) [Added January 1998].</p>    | <p>Verify that the facility manager and/or owner has a current and valid Dry Cleaning Owner/Manager Certification.</p> <p>Verify that the person operating the dry cleaning machine has a current and valid Dry Cleaning Operator Certification.</p> <p>(NOTE: In the event that an unforeseen/unpredictable situation prevents a dry cleaning facility from having a certified operator operating the dry cleaning equipment, the owner/manager will be allowed to continue operation of the dry cleaning machine with a non-certified operator for a period not to exceed three days per occurrence. Under no circumstances may an uncertified operator operate dry cleaning equipment at any facility for a total of more than ten days in any calendar year. If the use of an uncertified operator would cause nonperformance of required maintenance and leak detection, the facility must suspend dry cleaning</p>  |

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| <p><b>AE.75.29.NY.</b> Perc-dry cleaning systems must meet compliance inspection requirements (6 NYCRR 232.16) [Added January 1998].</p> | <p>operations until a certified operator is available.)</p> <p>Verify that stand-alone dry cleaning facilities are inspected at least annually, and mixed-use facilities are inspected according to the following schedule:</p> <ul style="list-style-type: none"> <li>- at least twice annually where any transfer or dry-to-dry vented equipment is operated</li> <li>- at least annually where only non-vented equipment is operated.</li> </ul> <p>Verify that compliance inspections are performed by an inspector registered with the Department or by an individual working under the supervision of a registered inspector.</p> <p>Verify that the Department is notified of all inspections, in writing at least seven days prior to inspection by the registered inspector.</p> <p>Verify that inspections are conducted in accordance with protocols specified by the department, using an inspection reporting form specified by the Department.</p> <p>Verify that analysis of air samples collected by passive sampling devices or the equivalent are conducted by a laboratory certified by the Environmental Laboratory Approval Program (ELAP) of the New York State Department of Health.</p> <p>(NOTE: The inspection will verify that a Department NOTICE is posted in a conspicuous location in the facility.)</p> <p>Verify that after the inspection is completed, the registered inspector provides a completed inspection reporting form to the Department and to the facility owner within 45 days of the inspection.</p> <p>(NOTE: Owner/manager or operator must make available upon request the most recent completed inspection reporting form to interested individuals for review on premises during normal business hours.)</p> <p>Verify that, if the inspection reveals a leak or malfunction, the facility is repaired within the timeframes established in 6 NYCRR 232.7 (see AE.75.13.NY.) and reinspected within one month.</p> |
| <p><b>AE.75.30.NY.</b> Perc-dry cleaning systems must display the public information notice (6 NYCRR 232.18) [Added January 1998].</p>   | <p>Verify that the notice shown in Appendix 1-15 is posted in a conspicuous location.</p> <p>(NOTE: The dimensions of the notice must not exceed 11 by 17 inches.)</p>   |

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| <p><b>AE.80.</b></p> <p><b>ACID PRODUCTION UNITS</b></p> <p><b>AE.80.1.NY.</b> Emissions of NO<sub>x</sub> from nitric acid production must be limited (6 NYCRR Section 224.1).</p> <p><b>AE.80.2.NY.</b> Emissions of SO<sub>2</sub> and sulfuric acid mist from sulfuric acid production must be limited (6 NYCRR 224.2).</p> | <p>(NOTE: Owners/operators of nitric acid and sulfuric acid production plants may, after submission of written request and the approval of the Commissioner, be exempt from these requirements.)</p> <p>Verify that emissions of NO<sub>x</sub> (expressed as nitrogen dioxide) to the outdoor atmosphere from any existing emission source used in nitric acid production are not in excess of the amounts listed in Appendix 1-6.</p> <p>(NOTE: An existing emission source is one for which an application for a permit to construct was received prior to 18 August 1971.</p> <p>Verify that emissions of NO<sub>x</sub> (expressed as nitrogen dioxide) to the outdoor atmosphere from any emission source or modification used in nitric acid production, for which an application for a permit to construct is received after 17 August 1971, are not in excess of 3.0 lb/ton of nitric acid produced (expressed as 100 percent nitric acid).</p> <p>(NOTE: Owners/operators of nitric acid and sulfuric acid production plants may, after submission of written request and the approval of the Commissioner, be exempt from these requirements.)</p> <p>Verify that emissions of SO<sub>2</sub> to the outdoor atmosphere from any existing emission source used in sulfuric acid production are not in excess of the amounts listed in Appendix 1-6.</p> <p>(NOTE: An existing emission source is one for which an application for a permit to construct was received prior to 18 August 1971.)</p> <p>Verify that emissions of SO<sub>2</sub> to the outdoor atmosphere from any emission source or modification used in sulfuric acid production, for which an application for a permit to construct is received after 17 August 1971, are not in excess of 4.0 lb/ton of sulfuric acid produced (expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>).</p> <p>Verify that emissions of sulfuric acid mist to the outdoor atmosphere, from any existing emission source used in sulfuric acid production, for which an application for a permit to construct is received prior to 18 August 1971, are not in excess of 0.50 lb/ ton of sulfuric acid produced (expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>).</p> <p>Verify that emissions of sulfuric acid mist to the outdoor atmosphere from any emission source or modification used in sulfuric acid production, for which an application for a permit to construct is received after 17 August 1971, are not in</p> |

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| <p><b>AE.80.3.NY.</b> Visible emissions from nitric acid and sulfuric acid production must be limited (6 NYCRR 224.3).</p>                       | <p>excess of 0.15 lb/ ton of sulfuric acid produced (expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>).</p> <p>(NOTE: Owners/operators of nitric acid and sulfuric acid production plants may, after submission of written request and the approval of the Commissioner, be exempt from these requirements.)</p> <p>Verify that no air contamination source used in producing nitric acid or sulfuric acid, for which an application for a permit to construct is submitted after 16 August 1971, emits to the outdoor atmosphere, smoke or visible emissions, except water, having an average opacity equal to or greater than 10 percent (6 min).</p> <p>Verify that no air contamination source used in producing nitric acid or sulfuric acid, for which an application for a permit to construct was received before 17 August 1971, emits smoke or visible emissions, except water, having an average opacity equal to or greater than 20 percent (6 min) to be emitted to the outdoor atmosphere.</p>       |
| <p><b>AE.80.4.NY.</b> Existing nitric acid and sulfuric acid production plants must install continuous monitoring (6 NYCRR 224.4(a)).</p>        | <p>(NOTE: Owners/operators of nitric acid and sulfuric acid production plants may, after submission of written request and the approval of the Commissioner, be exempt from these requirements.)</p> <p>Verify that any existing nitric acid plant with a production capacity greater than 300 tons per day (expressed as 100 percent nitric acid), located in an area of the state where any applicable ambient air quality standard for nitrogen dioxide is not being attained, installs, calibrates, maintains and operates a continuous stack monitoring system for the measurement of NO<sub>x</sub> (expressed as nitrogen dioxide) from each nitric acid producing emission source.</p> <p>Verify that any sulfuric acid plant with a production capacity of greater than 300 tons/day (expressed as 100 percent sulfuric acid) installs, calibrates, maintains, and operates a continuous stack monitoring system for the measurement of SO<sub>2</sub> from each sulfuric acid producing emission source.</p> |
| <p><b>AE.80.5.NY.</b> New or modified nitric acid and sulfuric acid production plants must install continuous monitoring (6 NYCRR 224.4(b)).</p> | <p>(NOTE: Owners/operators of nitric acid and sulfuric acid production plants may, after submission of written request and the approval of the Commissioner, be exempt from these requirements.)</p> <p>Verify that a continuous monitoring system for the measurement of NO<sub>x</sub> (expressed as nitrogen dioxide) from each nitric acid production source, or SO<sub>2</sub> from each sulfuric acid production source, is installed, calibrated, maintained and operated.</p>  |

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| <b>AE.80.6.NY.</b> Regulated nitric acid and sulfuric acid production plants must meet recordkeeping and reporting requirements (6 NYCRR 224.2(c)). | <p>(NOTE: Owners/operators of nitric acid and sulfuric acid production plants may, after submission of written request and the approval of the Commissioner, be exempt from these requirements.)</p> <p>Verify that regulated nitric acid and sulfuric acid production plants submit a written report which includes the following to the Commissioner for each calendar quarter:</p> <ul style="list-style-type: none"> <li>- emission averages for periods of excess emissions (a period of excess emissions is any 3-h period during which the arithmetic average of emissions for three consecutive 1-h periods exceeds any applicable emission standard)</li> <li>- the time and date of each period during which the continuous monitoring system was inoperative except to zero and span checks, and the nature of system repairs or adjustments</li> <li>- information that no excess emissions have occurred and the continuous monitoring system has not been inoperative, repaired or adjusted, if such is the case.</li> </ul> <p>Verify that a record of quarterly summaries, including daily production rates, hours of operation and all other data collected either by the continuous stack monitoring system or as necessary to convert stack monitoring data to the units of the applicable emission standards, is maintained for a period of 3 yr from the date of collection of such data.</p> <p>Verify that monitoring records are available for inspection during normal business hours by the Commissioner or his representative and copies are provided to the Commissioner or his representative upon request.</p> |

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| <p><b>AE.100.</b></p> <p><b>COATING OPERATIONS</b></p> <p><b>AE.100.1.NY.</b> Spraying of asbestos-containing materials for surface coating is prohibited (6 NYCRR 221.2).</p> <p><b>AE.100.2.NY.</b> Coating lines must use-coating substances that meet volatile organic compound (VOC) content limitations (6 NYCRR 228.3(a) and 228.5(h)).</p> <p><b>AE.100.3.NY.</b> Coating lines must meet specific standards when storing or disposing of VOCs (6 NYCRR 228.10) [Revised March 2004].</p> | <p>Verify that surface coating is not performed by the spraying of asbestos or asbestos-containing materials.</p> <p>Verify that coating substances with VOC contents in excess of the limits described in Appendix 1-16 are not used.</p> <p>(NOTE: Coating substances with VOC contents in excess of the limits described in Appendix 1-16 may be used if it can be demonstrated that the use of the coating system or control equipment meets the requirements of this section.)</p> <p>(NOTE: Any coating line operation that is not subject to the control requirements of this section because its annual potential to emit VOCs is below the applicability criteria must maintain records that verify the annual potential to emit VOCs.)</p> <p>Verify that, within the work area(s) associated with a coating line, closed, nonleaking containers are used for the following:</p> <ul style="list-style-type: none"> <li>- to store or dispose of cloth or other absorbent applicators impregnated with VOC solvents that are used for surface preparation, cleanup or coating removal</li> <li>- to store spent or fresh VOC solvents to be used for surface preparation, cleanup or coating removal</li> <li>- to store or dispense surface coatings and/or inks unless production, sampling, maintenance or inspection procedures require operational access</li> <li>- to store or dispose of spent surface coatings or spent VOC solvents.</li> </ul> <p>Verify that VOC solvents are not used to cleanup spray equipment unless equipment is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere.</p> <p>(NOTE: This prohibition does not apply to the actual device or equipment designed for the purpose of applying a coating material to a substrate. These devices may include, but are not limited to spray guns, flow coaters, dip tanks, rollers, knife coaters, and extrusion coaters.)</p> <p>Verify that spills are minimized during the handling and transfer of coatings and VOC solvents.</p> |

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|  | <p>Verify that, beginning on January 1, 2005, spray guns used to apply mobile equipment repair and refinishing or color-matched coatings are cleaned by one of the following:</p> <ul style="list-style-type: none"> <li>- an enclosed spray gun cleaning system that is kept closed when not in use</li> <li>- non-atomized discharge of VOC solvent into a paint waste container that is kept closed when not in use</li> <li>- disassembling and cleaning of the spray gun in a vat that is kept closed when not in use</li> <li>- atomized spray into a paint waste container that is fitted with a device designed to capture atomized VOC solvent emissions.</li> </ul>                                      |
| <b>AE.100.4.NY.</b> Coating lines must meet opacity standards (6 NYCRR 228.4).   | Verify that coating lines do not have or allow emissions to the outdoor atmosphere having an average opacity of 20 percent or greater for any consecutive 6 min period.  |
| <b>AE.100.5.NY.</b> Coating lines must meet recordkeeping requirements (6 NYCRR 228.5(a) and (k)) [Revised March 2004].          | <p>Verify that coating lines maintain certification from the coating supplier/manufacturer that verifies the parameters used to determine the actual VOC content of the as applied coating, for each coating used.</p> <p>Verify that purchase, usage, and/or production records of the coating material, including solvents are maintained.</p> <p>Verify that coating lines required to perform solids-as-applied calculations maintain records to verify the parameters used in the formula.</p> <p>Verify that coating lines maintain a record that identifies each air cleaning device that has an overall removal efficiency of at least 85 percent.</p> <p>Verify that records are maintained for 5 yr.</p> |
| <b>AE.100.6.NY.</b> Coating lines that use air cleaning devices must install and operate continuous monitors (6 NYCRR 228.5(g)). | <p>Verify that continuous monitors of the following parameters are installed, periodically calibrated, and operated at all times when the associated control equipment is operating:</p> <ul style="list-style-type: none"> <li>- exhaust gas temperature of all incinerators</li> <li>- temperature rise across catalytic incinerator beds</li> <li>- breakthrough of volatile organic compounds on a carbon adsorption unit</li> <li>- any other continuous monitoring or recording device required by the Commissioner.</li> </ul>  |

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| <b>AE.100.7.NY.</b> Surface coating processes must obtain a permit (6 NYCRR Sections 228.1) [Added March 2004]. | <p>(NOTE: This checklist item is repeated at AE.6.8.NY.)</p> <p>Verify that every owner or operator of a facility containing a coating line described in Appendix 1-16 and which meets the following applicability criteria obtains a Title V facility permit, a State facility permit or a registration under Part 201 (Permits and Registrations) of this Title, as appropriate:</p> <ul style="list-style-type: none"> <li>- a coating line listed in Appendix 1-16 and located in the New York City metropolitan area</li> <li>- a coating line listed in Table 1 of Appendix 1-16 and located in the Lower Orange County metropolitan area, for which the annual potential to emit volatile organic compounds (VOCs) from all sources at the facility, regardless of process type but excluding combustion installations, equals or exceeds 10 tons</li> <li>- a coating line listed in Table 2 of appendix 1-16 and located in the Lower Orange County metropolitan area, for which the annual potential to emit VOCs from all sources at the facility, regardless of process type but excluding combustion installations, equals or exceeds 25 tons</li> <li>- a coating line listed in Table 1 of Appendix 1-16 and located outside the New York City metropolitan area and the Lower Orange County metropolitan area, for which the annual potential to emit VOCs from all sources at the facility, regardless of process type but excluding combustion installations, equals or exceeds 10 tons</li> <li>- a coating line listed in Table 2 of Appendix 1-16 and located outside the New York City metropolitan area and the Lower Orange County metropolitan area, for which the annual potential to emit VOCs from all sources at the facility, regardless of process type but excluding combustion installations, equals or exceeds 50 tons</li> <li>- every owner or operator of a facility that applies mobile equipment repair and refinishing or color-matched coatings to mobile equipment or mobile equipment components regardless of the facility's location or annual potential to emit VOCs must be in compliance with this Part by January 1, 2005.</li> </ul> <p>(NOTE: Any coating line that is or becomes subject to these provisions will remain subject to these provisions even if the annual potential to emit VOCs for the facility later falls below the thresholds.)</p> |



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| <b>AE.115.3.NY.</b> Solvent metal cleaning processes that cannot comply with the solvent metal cleaning standards must apply reasonably available control technology (RACT) (6 NYCRR 226.5). | <p>(NOTE: An invoice, a bill of sale, a certificate covering multiple sales, a Material Safety Data Sheet (MSDS) or other appropriate documentation acceptable to the Department may be used to comply with this requirement.)</p> <p>(NOTE: See AE.115.1.NY. for exemptions.)</p> <p>Verify that the Department accepts satisfactory evidence that the source has applied RACT, and has a plan to develop the technologies necessary to comply with the requirements of this section is submitted to the Commissioner.</p> <p>Verify that process specific RACT demonstration is submitted with the application of a Title V facility permit of a State facility permit.</p> <p>Verify that the process specific RACT demonstrations are submitted to the EPA for approval as a revision to the State Implementation Plan.</p> |





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| <b>DEGREASING OPERATIONS</b><br><br><b>AE.117. Vapor Cleaning</b><br><br><b>AE.117.1.NY.</b> Vapor cleaning degreasers must meet equipment standards (6 NYCRR 226.3(b)) [Revised March 2004].<br><br><b>AE.117.2.NY.</b> Open-top vapor cleaning degreasers must meet operating standards (6 NYCRR 226.4(b)) [Revised March 2004]. | <p>(NOTE: See AE.115.1.NY. for exemptions.)</p> <p>Verify that open-top vapor degreasers have all of the following equipment:</p> <ul style="list-style-type: none"> <li>- a cover that can be operated without disturbing the vapor zone</li> <li>- safety switches that shut off sump heat if the condenser malfunctions</li> <li>- safety switches that shut off the pump if vapor level drops excessively</li> <li>- one of the following:             <ul style="list-style-type: none"> <li>- a freeboard ratio that is greater than or equal to 0.75, and a powered or mechanically assisted cover if the top opening is greater than 10 ft<sup>2</sup></li> <li>- a refrigerated chiller</li> <li>- local exhaust ventilation and a carbon adsorption unit or equivalent system, for the collection of VOCs.</li> </ul> </li> </ul> <p>(NOTE: See AE.115.1.NY. for exemptions.)</p> <p>Verify that solvent carryout is minimized using the following measures:</p> <ul style="list-style-type: none"> <li>- parts are racked to allow full drainage</li> <li>- parts are moved in and out of degreaser tank at less than 11 ft/min</li> <li>- the work load is degreased in the vapor zone at least 30 s or until condensation ceases</li> <li>- any pools of solvent are tipped out before removal</li> <li>- parts are dried for at least 15 s before removal.</li> </ul> <p>Verify that work loads do not occupy more than half the open-top area of the degreaser tank .</p> <p>Verify that spraying occurs only below the vapor level.</p> |

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| <b>AE.117.3.NY.</b> Conveyorized degreasers must meet equipment standards (6 NYCRR 226.3(c)) [Revised January 1999; Revised March 2004]. | <p>(NOTE: See AE.115.1.NY. for exemptions.)</p> <p>Verify that conveyorized degreasers have either:</p> <ul style="list-style-type: none"> <li>- a refrigerated chiller</li> <li>- local exhaust ventilation and a carbon adsorption unit or an equivalent system for the collection of VOCs.</li> </ul> <p>Verify that carryout of liquid and vapor is prevented in conveyorized degreasers through use of a drying tunnel, rotating basket, or other device acceptable to the Department.</p> <p>Verify that conveyorized degreasers have safety switches that shut off the system when the malfunctions.</p> <p>Verify that conveyorized degreasers minimize openings at the entrance and exit to silhouette work and conveyor.</p> |
| <b>AE.117.4.NY.</b> Conveyorized degreasers must meet operating standards (6 NYCRR 226.4(c)).  | <p>(NOTE: See AE.115.1.NY. for exemptions.)</p> <p>Verify that the exhaust ventilation rate for conveyorized degreasers does not exceed 125 percent of the minimum ventilation rate required for the protection of workers in the vicinity of the degreaser.</p> <p>Verify that carry-out emissions are minimized by either proper racking or the conveyor speed is less than 11 ft/min.</p> <p>Verify that water is not visibly detectable in the solvent left in the water separator.</p>  |



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| NYCRR 215.3 (i)) [Added March 2010].   | <p>New York State Department of State's Office of Fire Prevention and Control.</p> <p>Verify that, when fire training is performed on acquired structures, the structures are emptied and stripped of any material that is toxic, hazardous or likely to emit toxic smoke (such as asbestos, asphalt shingles and vinyl siding or other vinyl products) prior to burning and is at least 300 feet from other occupied structures.</p> <p>Verify that no more than one structure per lot or within a 300 foot radius (whichever is bigger) is burned in a training exercise.</p> |

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| <p><b>AE.135.</b></p> <p><b>VEHICLE EMISSIONS</b></p> <p><b>AE.135.1.NY.</b> Non-electric, non-diesel powered motor vehicles within the New York Metropolitan enhanced inspection region must meet specific requirements (6 NYCRR 217-1.2, 217-1.3(a), and 217-1.3(b)) [Revised January 1998; Revised March 2003].</p> <p><b>AE.135.2.NY.</b> Non-electric, non-diesel powered motor vehicles not registered or operated within the New York metropolitan enhanced inspection and maintenance region must meet specific requirements (6 NYCRR 217-1.2(b) and 217-1.3(c)) [Added January 1998; Revised March</p> | <p>(NOTE: New York Metropolitan Enhanced Inspection and Maintenance Region is comprised of the counties of Suffolk (except Fisher's Island), Nassau, Kings, Queens, Richmond, New York, Bronx, Westchester, and Rockland.)</p> <p>Verify that a non-electric or non-diesel powered motor vehicle registered or primarily operated in the New York Metropolitan enhanced inspection region meet the following requirements:</p> <ul style="list-style-type: none"> <li>- does not emits carbon monoxide (CO), oxides of nitrogen (NOX), or hydrocarbons (HC) in the exhaust in excess of standards specified in Appendix 1-17</li> <li>- for gasoline powered motor vehicles only, the gas cap meets the minimum standard contained in Appendix 1-20</li> <li>- the combined carbon monoxide (CO) carbon dioxide (CO(2)) emission from the vehicle tailpipe is less than 6.0 percent</li> <li>- for model year 1996 and newer motor vehicles, the on-board diagnostic system: <ul style="list-style-type: none"> <li>- does not fail to function as designed, or</li> <li>- does not fail to complete diagnostic routines for necessary supported emission control systems, or</li> <li>- indicates that the Malfunction Indicator Light fails to illuminate at the starter switch Key-On-Engine-Off position, or</li> <li>- the Malfunction Indicator Light is illuminated when the engine is running, or</li> <li>- the Malfunction Indicator Light is illuminated.</li> </ul> </li> </ul> <p>(NOTE: Any person who owns, operates, or leases a non-electric or non-diesel powered motor vehicle subject to the above requirements must have adjustments, repairs, or replacements made to the vehicle to ensure that the above requirements met unless an emission inspection waiver is issued by the Department of Motor Vehicles.)</p> <p>(NOTE: Section 217-1.3(c) applies to all non-electric or non-diesel powered motor vehicles registered or primarily operated in any county in the State not included in the New York metropolitan enhanced inspection and maintenance region.)</p> <p>Verify that, for gasoline powered vehicles, the gas cap meets the minimum standard contained in Table 1-20.</p> <p>Verify that, for model year 1996 and newer motor vehicles, the on-board</p> |

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| 2003].   | diagnostic system meets the following requirements: <ul style="list-style-type: none"> <li>- functions as designed</li> <li>- completes diagnostic routines for necessary supported emission control systems</li> <li>- indicates that the Malfunction Indicator Light fails to illuminate at the starter switch Key-On-Engine-Off position</li> <li>- the Malfunction Indicator Light is illuminated when the engine is running</li> <li>- the Malfunction Indicator Light is illuminated.</li> </ul>   |  |
| <b>AE.135.3.NY.</b> [Deleted<br>March 2003].   | (6 NYCRR 217-2.3 repealed.)  |  |
| <b>AE.135.4.NY.</b> [Moved<br>March 2003].   | (NOTE: Moved to AE.135.9.NY. March 2003.)  |  |
| <b>AE.135.5.NY.</b> [Deleted<br>March 2004].   | (NOTE: Regulations repealed.)  |  |
| <b>AE.135.6.NY.</b> [Deleted<br>March 2004].   | (NOTE: Regulations repealed.)  |  |
| <b>AE.135.7.NY.</b> [Deleted<br>March 2004].   | (NOTE: Regulations repealed.)  |  |
| <b>AE.135.8.NY.</b> Late model motor vehicles must be certified to California emission standards (6 NYCRR 218-1.1, 218-2.1, and 218-8.2) [Added March 2003; Revised March 2006]. | (NOTE: California emission certification applies to the following: <ul style="list-style-type: none"> <li>- all 1993, 1994, 1996 and subsequent model-year motor vehicles that are passenger cars and light-duty trucks, motor vehicle engines, and air contaminant emission control systems</li> <li>- all 2004 and subsequent model-year motor vehicles that are medium-duty vehicles, motor vehicle engines, and air contaminant emission control systems</li> <li>- all 2005 and subsequent model-year motor vehicles that are heavy-duty otto-cycle engines or vehicles that use such engines</li> <li>- all 2005 and subsequent model-year motor vehicles that are heavy duty diesel engines or vehicles that use such engines offered for sale or lease, or sold, or leased, for registration in this state</li> <li>- also, all motor vehicles (from the above years) of the United States or its</li> </ul> |  |

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|  | <p>agencies.)</p> <p>Verify that all 1993, 1994, 1996 or subsequent model-year, new or used motor vehicle, new motor vehicle engine or motor vehicle with a new motor vehicle engine in the State of New York is certified to California emission standards and meets all other applicable requirements of California Code of Regulations, Title 13, sections 1956.8, 1956.9, 1960.1, 1960.1.5, 1960.5, 1961, 1962, 1964, 1965, 1968.1, 1976, 1978, 2030, 2031, 2047, 2065, 2235 and Article 1.5 (see Table 1, section 200.9 of this Title).</p> <p>Verify that all 2009 or subsequent model-year, new or used motor vehicle, new motor vehicle engine or motor vehicle with a new motor vehicle engine in the State of New York is certified to California greenhouse gas exhaust emission standards and meets all other applicable requirements of California Code of Regulations, title 13, section 1961.1.</p> <p>(NOTE: This requirement applies to vehicles sold, registered, offered for sale or lease, imported, delivered, purchased, rented, leased, acquired, or received.)</p> <p>(NOTE: Vehicle sold to another dealer, sold for the purpose of being wrecked or dismantled, sold exclusively for off-highway use or sold for registration out of state are not required to be California certified.)</p> <p>(NOTE: This requirement does not apply to the following:</p> <ul style="list-style-type: none"> <li>- a vehicle acquired by a resident of this state for the purpose of replacing a vehicle registered to such resident which was damaged or became inoperative beyond reasonable repair or was stolen while out of this state; provided that such replacement vehicle is acquired out of state at the time the previously owned vehicle was either damaged or became inoperative or was stolen</li> <li>- a vehicle transferred by inheritance</li> <li>- a vehicle transferred by court decree</li> <li>- any vehicle sold after the effective date of this Subpart if the vehicle was registered in this state before such effective date</li> <li>- any motor vehicle having a certificate of conformity issued pursuant to the Clean Air Act (42 U.S.C. Sec. 7401 et seq.) (see Table 1, section 200.9 of this Title) and originally registered in another state by a resident of that state who subsequently establishes residence in this state and who upon registration of the vehicle in this state provides satisfactory evidence to the New York State Department of Motor Vehicles of the previous residence and registration</li> <li>- emergency vehicles</li> <li>- military tactical vehicles and equipment</li> <li>- vehicles exempted by California Health and Safety Code, section 43656. (See Table 1, section 200.9 of this Title.)</li> </ul> <p>(NOTE: It is conclusively presumed that the equitable or legal title to any motor vehicle with an odometer reading of 7500 miles or more has been transferred to an ultimate purchaser and that the equitable or legal title to any motor vehicle with an odometer reading of less than 7500 miles has not been transferred to an ultimate</p> |



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| <p><b>AE.135.9.NY.</b> On-road heavy duty vehicles propelled by diesel or non-diesel fueled engines must restrict emissions (6 NYCRR 217-3.1 through 217-3.3) [Revised January 2000; Revised March 2003].</p> | <p>purchaser.)</p> <p>(NOTE: Moved from AE.135.4.NY, March 2003.)</p> <p>(NOTE: This applies to all on-road heavy duty vehicles propelled by diesel fueled and non-diesel fueled engines excluding marine vessels. "Heavy duty vehicle" means a vehicle that has a GVWR exceeding 8,500 pounds and is designed primarily for transporting persons or properties.)</p> <p>Verify that heavy duty vehicles including buses or do not idle for more than 5 consecutive minutes when not in motion.</p> <p>(NOTE: These provisions do not apply when:</p> <ul style="list-style-type: none"> <li>- a vehicle that is forced to remain motionless due to traffic conditions over which the operator has no control</li> <li>- regulations adopted by Federal, state or local agencies having jurisdiction require the maintenance of a specific temperature for passenger comfort (the idling time specified above (5 min) may be increased, but only to the extent necessary to comply with such regulations)</li> <li>- a diesel or non-diesel engine that is being used to provide power for an auxiliary purpose, such as loading, discharging, mixing or processing cargo, controlling cargo temperature, construction, lumbering, oil or gas well servicing, farming, or when operation of the engine is required for the purpose of maintenance</li> <li>- fire, police and public utility trucks or other vehicles performing emergency services</li> <li>- trucks owned or operated by persons engaged in mining and quarrying are used within the confines of such person's property</li> <li>- a diesel fueled truck that is to remain motionless for a period exceeding 2 h, and during which period the ambient temperature is continuously below 25 °F</li> <li>- a heavy duty diesel vehicle, as defined in subdivision 217-5.1(o), that is queued for or is undergoing a state authorized periodic or roadside diesel emissions inspection pursuant to Subpart 217-5</li> <li>- a hybrid electric vehicle, as defined in subdivision 217-5.1(r), idling for the purpose of providing energy for battery or other form of energy storage recharging</li> <li>- heavy duty vehicles used for agricultural purposes on a farm</li> <li>- electric powered vehicles.)</li> </ul> |
| <p><b>AE.135.10.NY.</b> Heavy-duty diesel vehicles (HDDV) must meet emission requirements (6 NYCRR 217-5.2 through 5.4) [Added March 2003].</p>   | <p>Verify that all registered HDDVs pass an annual diesel emission inspection test performed by a certified inspector.</p> <p>Verify that all HDDVs meet the following opacity standards:</p> <p><u>Engine model year</u>                      <u>Maximum opacity (percent)</u></p>   |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |                |    |             |    |                |    |
|  | <table> <tr> <td>1973 and Older</td><td>70</td></tr> <tr> <td>1974 - 1990</td><td>55</td></tr> <tr> <td>1991 and Newer</td><td>40</td></tr> </table> <p>Verify that all HDDV have a functioning emission control apparatus as required by specifications of the manufacturer.</p> <p>Verify that all HDDV do not have any component, element of design, or emission control apparatus, installed or required to be installed on the vehicle or diesel engine that is not functioning or has been disconnected, detached, deactivated, tampered with or in any other way rendered inoperable or less effective than designed by the original equipment or vehicle or engine manufacturer.</p> <p>(NOTE: 217-5 applies to all HDDV motor vehicles except for:</p> <ul style="list-style-type: none"> <li>- authorized emergency vehicles</li> <li>- vehicles as defined in sections 401.7(E)(2), (F)(a) and 401.13 of the VTL [Editor's note: this can not be located]</li> <li>- agricultural trucks</li> <li>- farm type tractors and all terrain type vehicles used exclusively for agriculture or mowing purposes, or for snow plowing, other than for hire, farm equipment, including self-propelled machines used exclusively in growing, harvesting or handling farm produce, and self-propelled caterpillar or crawler-type equipment while being operated on the contract site, and timber harvesting equipment such as harvesters, wood chippers, forwarders, log skidders, and other processing equipment used exclusively off highway for timber harvesting and logging purposes</li> <li>- marine vessels</li> <li>- hybrid electric vehicles using diesel engines as a power source</li> <li>- military designated vehicles, meaning any motor vehicle owned by the U.S. Department of Defense and/or the U.S. military services and used in combat, combat support, combat service support, tactical or relief operations, or for training for such purposes.)</li> </ul> | 1973 and Older | 70 | 1974 - 1990 | 55 | 1991 and Newer | 40 |
| 1973 and Older   | 70   |                |    |             |    |                |    |
| 1974 - 1990  | 55   |                |    |             |    |                |    |
| 1991 and Newer   | 40   |                |    |             |    |                |    |
| <b>AE.135.11.NY.</b> 2006 or subsequent model-year personal watercraft engines must be certified to California emission standards, (6 NYCRR 210-2.1) [Added March 2004]. | <p>Verify that no person to sells or registers, offers for sale or lease, imports, delivers, purchases, rents, leases, acquires or receives a 2006 or subsequent model-year, personal watercraft engine in the State of New York which is not certified to California emission standards and meets all other applicable requirements of California Code of Regulations, Title 13, sections 2440, 2442, 2443.1, 2443.2, 2443.3, 2444.1, 2444.2, 2445.1, 2445.2 , and 2446 (see Table 1, section 200.9 of this Title).</p> <p>(NOTE: This checklist item does not apply to:</p> <ul style="list-style-type: none"> <li>- sterndrive, inboard and outboard engines</li> <li>- engines used in off-road military tactical vehicles or equipment which have been exempted from regulations under the federal national security exemption</li> <li>- vehicles and equipment covered by the definition of military tactical vehicle that are commercially available and for which a federal certificate of conformity has been issued.)</li> </ul>  |                |    |             |    |                |    |

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| <b>AE.145.</b><br><br><b>ASPHALT PAVING MATERIALS/ OPERATIONS</b><br><br><b>AE.145.1.NY.</b> VOC compounds cannot be used to liquefy asphalt used for paving (6 NYCRR 211.4(a)).<br><br><b>AE.145.2.NY.</b> Asphalt must meet VOC content limitations (6 NYCRR 211.4(b)). | <p>Verify that VOC compounds are not used to liquefy asphalt used for paving, except for:</p> <ul style="list-style-type: none"> <li>- asphalt used in the production of long-life stockpile materials for pavement patching and repair</li> <li>- asphalt applied at low ambient temperature from October 16th to May 1st</li> <li>- asphalt used as a penetrating prime coat for the purpose of preparing an untreated absorbent surface to receive an asphalt surface.</li> </ul> <p>Verify that the VOC content of asphalt used does not exceed the following amounts in percent by weight:</p> <ul style="list-style-type: none"> <li>- 2 percent for ASTM grades RS-1, SS-1, SS-1h, CSS-1, and CSS-1h</li> <li>- 3 percent for ASTM grades RS-2, CRS-1, CRS-2, HFRS-2 and HFMS-2h</li> <li>- 10 percent for ASTM grades MS-2 and HFMS-2</li> <li>- 12 percent for ASTM grades CMS-2 and CMS-2h.</li> </ul> |

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| <b>AE.160.</b><br><br><b>COUNTY/CITY-SPECIFIC REQUIREMENTS</b><br><br><b>AE.160.1.NY.</b> Construction or modification of an indirect source of air contamination south of 60th Street in New York County requires a permit (6 NYCRR 203.3) [Revised January 1998].<br><br><b>AE.160.2.NY.</b> [Deleted March 2006].<br><br><b>AE.160.3.NY.</b> Architectural coatings are subject to VOC standards and specific operation practices (6 NYCRR 205.1, 205.3) [Added March 2004; Revised March 2006; Revised March 2008]. | <p>Verify that, for construction or modification of indirect sources of air contamination south of 60th Street in New York County, a permit is obtained.</p> <p>(NOTE: Indirect sources of air contamination constructed or modified prior to 13 January 1975 are exempt from this requirement.)</p> <p>(NOTE: 6 NYCRR 205.4 was revised, architectural coating requirements are statewide.)</p> <p>(NOTE: This checklist item is applicable to any person who supplies, sells, offers for sale, or manufacturers any architectural coating for use within the State of New York, as well as any person who applies or solicits the application of any architectural coating within the State of New York. This checklist item is not applicable to the following:</p> <ul style="list-style-type: none"> <li>- any architectural coating that is sold or manufactured for use outside of the State of New York or for shipment to other manufacturers for reformulation or repackaging</li> <li>- any aerosol coating product</li> <li>- any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less.)</li> </ul> <p>Verify that no architectural coating manufactured on or after January 1, 2005 contains volatile organic compounds in excess of the limits specified in Appendix 1-19 is applied.</p> <p>Verify that all containers used to apply the contents therein to a surface directly from the container by pouring, siphoning brushing or rolling, padding, ragging or other means, are closed when not in use.</p> <p>(NOTE: These architectural coatings containers include, but are not limited to, drums, buckets, cans, pails, trays, or other application containers.)</p> <p>Verify that containers of any VOC-containing materials used for thinning and cleanup are closed when not in use.</p> <p>Verify that the architectural coating is not thinned to exceed the applicable VOC</p> |

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|  | <p>limit.</p> <p>Verify that the rust preventive coatings comply with the industrial maintenance coating VOC limit specified in Appendix 1-19.</p> |

## **Appendix 1-1**

### **Activities Exempt from Permitting Requirements**

(Source: 6 NYCRR 201-3.2(c))

[Revised January 2002; Revised March 2003; Revised March 2004; Revised March 2005]

(NOTE: The category headings used in the following listing of exemptions are strictly for organizational purposes and are not intended to be definitive.)

The following activities are exempt from permitting requirements at non-Title V facilities, but must be included in Title V facility permit applications:

#### **Combustion**

- (1) Stationary or portable combustion installations where the furnace has a maximum rated heat input capacity less than 10 million BTU/hr burning fossil fuels, other than coal, and coal and wood fired stationary combustion units with a maximum heat input less than 1 million BTU/hr. This exemption includes unit space heaters, which burn waste oil as defined in 6 NYCRR Subpart 225-2 and generated on-site, alone or in conjunction with used oil generated by a do-it-yourself oil changer as defined in 6 NYCRR Subpart 374-2.
- (2) Stationary or portable combustion installations located outside of any severe ozone non-attainment areas, where the furnace has a maximum rated heat input capacity less than 20 million Btu/hr burning fossil fuels other than coal, where the construction of the combustion installation commenced before June 9, 1989.
- (3) Stationary or portable internal combustion engines which meet the following criteria:
  - (i) are diesel or natural gas powered, and located within any severe ozone nonattainment area, and have maximum mechanical power rating of less than 225 brake horsepower; or
  - (ii) are diesel or natural gas powered, and located outside of any severe ozone nonattainment areas, and have maximum mechanical power rating of less than 400 brake horsepower or;
  - (iii) are gasoline powered and have a maximum mechanical power rating of less than 50 brake horsepower;
- (4) Stationary or portable internal combustion engines which are temporarily located at a facility for a period not to exceed 30 days per calendar year, where the total combined maximum mechanical power rating for all affected units is less than 1000 brake horsepower.
- (5) Gas turbines with a heat input at peak load less than 10 million BTU per hour;
- (6) Emergency power generating stationary internal combustion engines as defined in 6 NYCRR paragraph 227-2.2(b)(7) and engine test cells at engine manufacturing facilities which are utilized for research and development, reliability performance testing, or quality assurance performance testing.

#### **Combustion-Related**

- (7) Non-contact water cooling towers and water treatment systems for process cooling water and other water containers designed to cool, store or otherwise handle water that has not been in direct contact with gaseous or liquid process streams;

#### **Agricultural**

- (8) Feed and grain milling, cleaning, conveying, drying and storage operations including grain storage silos, where such silos exhaust to an appropriate emission control device, excluding grain terminal elevators with permanent storage capacities over 2.5 million U.S. bushels, and grain storage elevators with capacities above one million bushels;
- (9) Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment;

#### **Commercial -- Food Service Industries**

- (10) Flour silos at bakeries, provided all such silos are exhausted through an appropriate emission control device;
- (11) Emissions from flavorings added to a food product where such flavors are manually added to the product.

#### **Commercial -- Graphic Arts**

- (12) Screen printing inks/coatings or adhesives which are applied by a hand-held squeegee. A hand-held squeegee is one that is not propelled through the use of mechanical conveyance and is not an integral part of the screen printing process;
- (13) Graphic arts processes at facilities located outside the New York City metropolitan area whose facility-wide total emissions of volatile organic compounds from inks, coatings, adhesives, fountain solutions and cleaning solutions does not exceed 20 pounds per day;
- (14) Graphic label and/or box labeling operations where the inks are applied by stamping or rolling;
- (15) Graphic arts processes which are specifically exempted from regulation under Part 234 of this Title, with respect to emissions of volatile organic compounds which are not given an A rating;

#### Commercial -- Other

- (16) Gasoline dispensing sites with an annual throughput less than 120,000 gal located outside any severe ozone non-attainment areas;
- (17) Surface coating and related operations which use less than 25 gal per month of coating materials (paints) and cleaning solvents, combined, subject to the following:
  - (i) the facility is located outside of any severe ozone nonattainment area; and
  - (ii) all abrasive cleaning and surface coating operations are performed in an enclosed building where such operations are exhausted into appropriate emission control devices.
- (18) Abrasive cleaning operations which exhaust to an appropriate emission control device. (19) Ultraviolet curing operations.
- (19) Ultraviolet curing operations.

#### Municipal/Public Health Related

- (20) Ventilating systems for landfill gases, where the systems are vented directly to the atmosphere, and the ventilating system has been required by, and is operating under, the conditions of a valid Part 360 permit, or Order on Consent;

#### Storage Vessels

- (21) Distillate and residual fuel oil storage tanks with storage capacities below 300,000 barrel.
- (22) Pressurized fixed roof tanks which are capable of maintaining a working pressure at all times to prevent emissions of volatile organic compound to the outdoor atmosphere.
- (23) External floating roof tanks which are of welded construction and are equipped with a metallic-type shoe primary seal and a secondary seal from the top of the shoe seal to the tank wall.
- (24) External floating roof tanks which are used for the storage of a petroleum or volatile organic liquid with a true vapor pressure less than 4.0 psi (27.6 kPa), are of welded construction and are equipped with one of the following:
  - (i) a metallic-type shoe seal;
  - (ii) a liquid-mounted foam seal;
  - (iii) a liquid-mounted liquid-filled type seal; or
  - (iv) equivalent control equipment or device;
- (25) Storage tanks, with capacities under 10,000 gallons, except those subject to either Part 229 or Part 233 of this Title.
- (26) Horizontal petroleum storage tanks.
- (27) Storage silos storing solid materials, provided all such silos are exhausted through an appropriate emission control device.

#### Industrial

- (28) Processing equipment at existing sand and gravel and stone crushing plants which were installed or constructed before August 31, 1983, where water is used other than for dust suppression, such as wet conveying, separating and washing.
- (29) all processing equipment at sand and gravel mines or quarries that:
  - (i) are permanent or fixed installations with a maximum rated processing capacity of 25 tons of minerals per h or less; or
  - (ii) are mobile (portable) installations with a maximum rated processing capacity of 150 tons of minerals per h or less;



- (30) Mobile (portable) stone crushers with maximum rated capacities below 150 tons of minerals per h which are located at non-metallic mineral processing operations.
- (31) Surface coating operations which are specifically exempted from regulation under Part 228 of this title, with respect to emissions of volatile organic compounds which are not given an A rating.
- (32) Pharmaceutical tablet branding operations.
- (33) Thermal packaging operations, including but not limited to, the image labeling, blister packing, shrink wrapping, shrink banding, and carton gluing.
- (34) Powder coating operations.
- (35) All tumblers used for the cleaning and/or deburring of metal products without abrasive blasting.
- (36) Presses used exclusively for molding or extruding plastics except where halogenated carbon compounds or hydrocarbon solvents are used as foaming agents.
- (37) Concrete batch plants where the cement weigh hopper and all bulk storage silos are exhausted through fabric filters, and the batch drop point is controlled by a shroud or other emission control device.
- (38) Cement storage operations where materials are transported by screw or bucket conveyors.
- (39) Solvent metal cleaning processes:
  - (i) cold cleaning degreasers with an open surface area of 11 square ft or less and an internal volume of 93 gal or less or, having an organic solvent loss of 3 gal per day or less; or
  - (ii) cold cleaning degreasers that use a solvent with a VOC content of 5 percent or less by weight, unless subject to the requirements in 40CFR 63, Subpart T
  - (iii) conveyorized degreasers with an air/vapor interface smaller than 22 square feet (2.0 m<sup>2</sup>), unless subject to the requirements in 40CFR 63, Subpart T
  - (iv) open-top vapor degreasers with an open-top area smaller than 11 square feet (1.0 m<sup>2</sup>), unless subject to the requirements in 40 CFR 63, Subpart T.

#### Miscellaneous

- (40) Ventilating and exhaust systems for laboratory operations.
- (41) Exhaust or ventilating systems for the melting of gold, silver, platinum and other precious metals.
- (42) Exhaust systems for paint mixing, transfer, filling or sampling and/or paint storage rooms or cabinets, provided the paints stored within these locations are stored in closed containers when not in use.
- (43) Exhaust systems for solvent transfer, filling or sampling, and/or solvent storage rooms provided the solvent stored within these locations are stored in closed containers when not in use.
- (44) Research and development activities, including both stand-alone and activities within a major stationary source, until such time as the Administrator completes a rulemaking to determine how the permitting program should be structured for these activities.
- (45) The application of odor counteractants and/or neutralizers.

## Appendix 1-2

### Trivial Activities Exempt from Permitting Requirements

(Source: 6 NYCRR 201-3.3(c)) [Revised March 2004]

(NOTE: The category headings used in the following listing of trivial activities are strictly for organizational purposes and are not intended to be definitive.)

The following activities are trivial and are exempt from permitting requirements and do not need to be included in the Title V facility permit application:

#### Combustion

- (1) Boiler water treatment operations.

#### Domestic/Work Station Comfort and Related

- (2) Any emission source or process constructed or operated at a domestic residence for domestic use.
- (3) Vacuum cleaning systems used exclusively for office type areas at industrial facilities, or commercial-or residential housekeeping.
- (4) Ventilating systems used exclusively for temperature and humidity control of buildings for the comfort of people living or working within the building except those systems which have applicable requirements under Title VI of the Act.
- (5) Exhaust systems for the storage of portable containers, drums, and bags of chemicals in rooms, buildings and warehouses, subject to the following:
  - (i) the rooms, buildings and warehouses subject to this exemption are solely for the purpose of chemical storage, and no mixing, transfer or filling operations with the exception of sampling for quality assurance/quality control purposes, take place within such areas; and
  - (ii) the chemicals stored in such areas are maintained in sealed containers.
- (6) Smoking rooms and areas.
- (7) Bathroom/toilet vents.
- (8) Beauty salons and barber shops.
- (9) Laundry dryers, extractors, or tumblers used to clean fabrics with water solutions of bleach and detergents, where the emissions of such operations are controlled by appropriate emission control devices.

#### Mobile Sources and Mobile Source Related

- (10) Engine exhaust emissions and/or refueling emissions generated from mobile and portable powered vehicles and equipment used for the propulsion or operation of passengers and/or freight transportation vehicles, marine vehicles and equipment, construction and off-road vehicles and equipment, farm vehicles and equipment, competition and entertainment vehicles and equipment, and/or any other type of mobile or portable engine powered vehicles or equipment when these vehicles or equipment are operated anywhere outside of an enclosed facility for the purpose of their design and intended use or for compliance assessment with any safety or emission control or inspection programs sanctioned by New York State, the federal government or any governmental entity empowered to carry out such activities.
- (11) Engine exhaust emissions and/or refueling emissions generated from mobile and portable powered vehicles and equipment such as competition and entertainment vehicles and equipment, farm vehicles and equipment, construction and off-road vehicles and equipment, automobiles, motorcycles, trucks, buses, marine vehicles and equipment, small engine powered tools and equipment, or any other type of mobile or portable engine powered vehicles or equipment which are collected and/or vented in any manner through any opening in a facility when these vehicles and equipment are operated in the facility for the purposes of their design and intended use, public safety, comfort or entertainment, facility maintenance, vehicle or equipment repair, adjustment or testing, or compliance assessment with any safety or emission control or inspection programs sanctioned by New York State, the federal government, or any governmental entity empowered to carry out such activities.
- (12) The use of products such as antifreeze and fuel additives for the purpose of maintaining motor vehicles.
- (13) Fugitive emissions related to movement of passenger vehicles, provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.

#### Agricultural

- (14) Ventilating systems used in buildings to house animals.

#### Commercial -- Food Service Industries

- (15) Emissions from process, exhaust or ventilating systems in bakeries and restaurants which derive over fifty percent of their revenues from retail sales on premises.
- (16) Non-conveyorized bakery ovens (this includes batch ovens, which are defined as a non-conveyor belt oven operating a single baking cycle in which a determinate amount of product is cooked at one baking).
- (17) Bakery ovens used exclusively to produce baked goods leavened chemically in the absence of yeast.
- (18) Process or exhaust or ventilating systems involved in the preparation of food, food blanching or cooking in water.
- (19) Process, exhaust or ventilating systems or stationary combustion installations exclusively involved in the production of maple syrup.

#### Commercial -- Graphic Arts

- (20) Lead melting pots used in printing establishments.
- (21) Blueprint machines.
- (22) Photocopying, photographic processing or related equipment.
- (23) Letter press operations. (24) Heat sealing operations which are used to seal and separate polyethylene and polypropylene bags.
- (24) Heat sealing operations which are used to seal and separate polyethylene and polypropylene bags.

#### Commercial -- Other

- (25) Batch process kilns used for firing ceramic ware, subject to the following:
  - (i) the exhaust stream does not contain emissions of fluorides, lead, and/or beryllium; and
  - (ii) the total heat input is less than 1 million BTU/hr

#### Municipal/Public Health Related

- (26) Equipment used exclusively to generate ozone for water treatment processes.
- (27) Air stripping processes utilized on public drinking water supplies.
- (28) Air strippers and soil vents used to remediate gasoline spills, where the air stripper or soil vent is located at a state funded site, or required under the provisions of an Order on Consent or stipulation agreement, and the operation of the air strippers or soil vents are conducted under the supervision of the Department and are properly controlled as required by the Department.
- (29) Air strippers and soil vents required under the provisions of an Order on Consent or stipulation agreement, or in operation at a superfund site.
- (30) Air strippers and soil vents operating for test purposes to qualify and quantify air emissions for remediation projects and for a time period acceptable to the regional air pollution control engineer.
- (31) Emissions from the storage and application of road salt (calcium chloride or sodium chloride).
- (32) All process emission sources which are located at private, public, or vocational education institutions, where the emissions are the result of teaching and training exercises, and the institution is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.
- (33) Emergency relief vents, stacks and ventilating systems except any with the potential to emit vinyl chloride located at a facility where ethylene dichloride, vinyl chloride and/or polyvinyl chloride are produced.
- (34) Snow plowing, street sweeping, sanding and ashing of streets and roads to abate traffic hazards.
- (35) Emergency road flares.
- (36) Road and lot paving and striping operations.
- (37) Public or private roadways, parking lots.
- (38) Manhole covers. (39) Sewers.
- (40) Storm drains and vents.
- (41) Solid waste dumpsters, including handling equipment and associated activities.
- (42) Excavation for the repair of underground utility lines such as water, electric, or natural gas.
- (43) Asbestos demolition and removal work subject to 40 CFR Part 61, Subpart M and/or 12 NYCRR Part 56.

#### Storage Vessels

- (44) Storage vessels, tanks and containers with a capacity of less than 750 gallons.

#### Maintenance and Construction Related Activities

- (45) The following activities are considered trivial when they occur strictly for maintenance or construction activities: plastic pipe welding, soldering, brazing, cutting torches, janitorial activities, steam cleaning, water washing, acid and caustic washing activities, miscellaneous use of solvents, adhesives and caulking, miscellaneous sandblasting, non-asbestos insulation removal, application of refractory and insulation, the periodic use of air for clean-up, and, the process of demolition and rebricking boilers, smelters, furnaces and kilns (this does not include the subsequent operation of such equipment), the surface coating of equipment and buildings as is related to maintenance and construction, and activities which occur for maintenance of grounds such as lawn care, weed control and pest control.
- (46) Excavation for new construction.

#### Industrial

- (47) Degreasing units which exclusively use non-hazardous air pollutant acids.
- (48) Degreasing units which exclusively use caustics (e.g., potassium hydroxide and sodium hydroxide).
- (49) Remote reservoir parts cleaners whose use of solvent is contained to the immediate cleaning of the part, after which time the solvent is drained through a drain opening, not to exceed 16 square inches, and is returned to a remote reservoir containing the solvent.
- (50) Cold cleaning degreasers that use a solvent with a VOC content of 5 percent or less by weight.
- (51) Cold cleaning degreasers with an internal volume less than or equal to 2 gallons.
- (52) Hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding or turning ceramic art work, ceramic precision parts, leather, metal parts, plastics, fiberboard, fiberglass, masonry, carbon, glass, graphite, wood or rubber.
- (53) Manual surface coating/painting processes which exclusively use brushes, rollers, or aerosol cans.
- (54) Hand-held or manually operated welding, brazing and soldering equipment.
- (55) Acetylene, butane, and propane torches.
- (56) Equipment used for hydraulic or hydrostatic testing.
- (57) Equipment lubricating systems, including metal cutting coolants and oils.
- (58) Pneumatic starters used to start reciprocating engines, turbines, and other equipment.
- (59) Instrument air systems, excluding fuel-fired compressors.
- (60) Air vents from air compressors and pneumatically operated equipment emitting ambient air.
- (61) Drum washing operations, where such operations are necessary to meet Resource Conservation and Recovery Act (RCRA) standards.
- (62) Vacuum producing devices where only ambient air and the oil emissions from the vacuum producing mechanism itself are exhausted.
- (63) Woodworking operations where no surface coating takes place, provided such operations exhaust to a sawdust collection system controlled by an appropriate emission control device.
- (64) Sawmills, provided all processes are located at least 500 ft from any recreational area, school, or private residence and all residues from debarking, planing, sawing, etc., are contained in such a manner as to minimize fugitive emissions.
- (65) Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
- (66) Drop hammers or hydraulic presses for forging or metalworking.
- (67) Transportable chemical containers including rail cars, portable tanks, totes and trailers.

#### Miscellaneous

- (68) Open fires. (see AE.130.1.NY. and AE.130.2.NY.)
- (69) Fire training activities.
- (70) Fire suppression systems.
- (71) Fecal incinerators with a charging rate not exceeding 10 pounds per hour, such as those used on certain vehicles or other special cases.
- (72) Paint mixing operations located at retail paint, hardware or department stores where the paint is sold in five gal or smaller containers.
- (73) Rifle and pistol ranges.
- (74) Aircraft de-icing operations.

- (75) Contaminant detectors, sampling devices and recorders.
- (76) Emissions from natural gas odoring activities.
- (77) Battery charging areas except those located at battery manufacturing plants.
- (78) Incubators.
- (79) The venting of compressed natural gas, butane or propane gas cylinders.
- (80) Coal car thaw-pit burners.
- (81) Consumer use of office equipment and products, not including printers or businesses primarily involved in photographic reproductions.
- (82) Consumer use of paper trimmers/binders.
- (83) Blacksmith forges.
- (84) Carbon dioxide lasers, used only on metals and other materials which do not emit hazardous air pollutants in the process.
- (85) Laser trimmers using appropriate emission control devices.
- (86) Environmental chambers not using hazardous air pollutant gases.
- (87) Shock chambers.
- (88) Humidity chambers.
- (89) Solar simulators.
- (90) Process water filtration systems and demineralizers.
- (91) Demineralized water tanks and demineralizer vents.
- (92) Steam leaks.
- (93) Steam vents.
- (94) Emissions of the following pollutants: water vapor, oxygen, carbon dioxide, nitrogen, inert gases such as argon, helium, neon, krypton and xenon, hydrogen, simple asphyxiants including methane and propane, and trace constituents included in raw materials or byproducts, where the constituents are less than 1 percent by weight for any regulated air pollutant, or 0.1 percent by weight for any carcinogen listed by the United States Department of Health and Human Services' Seventh Annual Report on Carcinogens (1994).

### Appendix 1-3

#### Hazardous Air Pollutants

(Source: 6 NYCRR 200-1) [Added January 1998]

| <b>CAS Number</b> | <b>Chemical Name</b>                        |
|-------------------|---|
| 75070             | Acetaldehyde                                |
| 60355             | Acetamide                                   |
| 75058             | Acetonitrile                                |
| 98862             | Acetophenone                                |
| 53963             | 2-Acetylaminofluorine                       |
| 107028            | Acrolein                                    |
| 79061             | Acrylamide                                  |
| 79107             | Acrylic acid                                |
| 107131            | Acrylonitrile                               |
| 107051            | Allyl chloride                              |
| 92671             | 4-Aminobiphenyl                             |
| 62533             | Aniline                                     |
| 90040             | o-Anisidine                                 |
| 1332214           | Asbestos                                    |
| 71432             | Benzene (including benzene from gasoline)   |
| 92875             | Benzidine                                   |
| 98077             | Benzotrichloride                            |
| 100447            | Benzyl chloride                             |
| 92524             | Biphenyl                                    |
| 117817            | Bis(2-ethylhexyl) phthalate (DEHP)          |
| 542881            | Bis(chloromethyl) ether                     |
| 75252             | Bromoform                                   |
| 106990            | 1,3-Butadiene                               |
| 156627            | Calcium cyanamide                           |
| 105602            | Caprolactam                                 |
| 133062            | Captan                                      |
| 63252             | Carbaryl                                    |
| 75150             | Carbon disulfide                            |
| 56235             | Carbon tetrachloride                        |
| 463581            | Carbonyl sulfide                            |
| 120809            | Catechol                                    |
| 133904            | Chloramben                                  |
| 57749             | Chlordane                                   |
| 7782505           | Chlorine                                    |
| 79118             | Chloroacetic acid                           |
| 532274            | 2-Chloroacetophenone                        |
| 108907            | Chlorobenzene                               |
| 510156            | Chlorobenzilate                             |
| 67663             | Chloroform                                  |
| 107302            | Chloromethyl methyl ether                   |
| 126998            | Chloroprene                                 |
| 1319773           | Cresols/Cresylic acid (isomers and mixture) |
| 95487             | o-Cresol                                    |
| 108394            | m-Cresol                                    |
| 106445            | p-Cresol                                    |
| 98828             | Cumene                                      |
| 94757             | 2,4-D, salts and esters                     |
| 3547044           | DDE   |
| 334883            | Diazomethane                                |

| <b>CAS Number</b> | <b>Chemical Name</b>                            |
|-------------------|---|
| 132649            | Dibenzofurans                                   |
| 96128             | 1,2-Dibromo-3-chloropropane                     |
| 84742             | Dibutylphthalate                                |
| 106467            | 1,4-Dichlorobenzene(p)                          |
| 91941             | 3,3-Dichlorobenzidine                           |
| 111444            | Dichloroethyl ether (Bis (2-chloroethyl) ether) |
| 542756            | 1,3-Dichloropropene                             |
| 62737             | Dichlorvos                                      |
| 111422            | Diethanolamine                                  |
| 121697            | N,N-Diethyl aniline (N,N-Dimethylaniline)       |
| 64675             | Diethyl sulfate                                 |
| 119904            | 3,3-Dimethoxybenzidine                          |
| 60117             | Dimethyl aminoazobenzene                        |
| 119937            | 3,3-Dimethylbenzidine                           |
| 79447             | Dimethyl carbamoyl chloride                     |
| 68122             | Dimethyl formamide                              |
| 57147             | 1,1-Dimethyl hydrazine                          |
| 131113            | Dimethyl phthalate                              |
| 77781             | Dimethyl sulfate                                |
| 534521            | 4,6-Dinitro-o-cresol, and salts                 |
| 51285             | 2,4-Dinitrophenol                               |
| 121142            | 2,4-Dinitrotoluene                              |
| 123911            | 1,4-Dioxane (1,4-Diethyleneoxide)               |
| 122667            | 1,2-Diphenylhydrazine                           |
| 106898            | Epichlorohydrin (1-Chloro-2,3-epoxypropane)     |
| 106887            | 1,2-Epoxybutane                                 |
| 140885            | Ethyl acrylate                                  |
| 100414            | Ethyl benzene                                   |
| 51796             | Ethyl carbamate (Urethane)                      |
| 75003             | Ethyl chloride (Chloroethane)                   |
| 106934            | Ethylene dibromide (Dibromoethane)              |
| 107062            | Ethylene dichloride (1,2-Dichloroethane)        |
| 107211            | Ethylene glycol                                 |
| 151564            | Ethylene imine (Aziridine)                      |
| 75218             | Ethylene oxide                                  |
| 96457             | Ethylene thiourea                               |
| 75343             | Ethylidene dichloride (1,1-Dichloroethane)      |
| 50000             | Formaldehyde                                    |
| 76448             | Heptachlor                                      |
| 118741            | Hexachlorobenzene                               |
| 87683             | Hexachlorobutadiene                             |
| 77474             | Hexachlorocyclopentadiene                       |
| 67721             | Hexachloroethane                                |
| 822060            | Hexamethylene-1,6-diisocyanate                  |
| 680319            | Hexamethylphosphoramide                         |
| 110543            | Hexane  |
| 302012            | Hydrazine                                       |
| 7647010           | Hydrochloric acid                               |
| 7664393           | Hydrogen fluoride (Hydrofluoric acid)           |
| 123319            | Hydroquinone                                    |
| 78591             | Isophorone                                      |
| 58899             | Lindane (all isomers)                           |
| 108316            | Maleic anhydride                                |
| 67561             | Methanol  |
| 72435             | Methoxychlor                                    |

| <b>CAS Number</b> | <b>Chemical Name</b>                       |
|-------------------|--|
| 74839             | Methyl bromide (Bromomethane)              |
| 74873             | Methyl chloride (Chloromethane)            |
| 71556             | Methyl chloroform (1,1,1-Trichloroethane)  |
| 78933             | Methyl ethyl ketone (2-Butanone)           |
| 60344             | Methyl hydrazine                           |
| 74884             | Methyl iodide (Iodomethane)                |
| 108101            | Methyl isobutyl ketone (Hexone)            |
| 624839            | Methyl isocyanate                          |
| 80626             | Methyl methacrylate                        |
| 1634044           | Methyl tert butyl ether                    |
| 101144            | 4,4-Methylene bis (2-chloroaniline)        |
| 75092             | Methylene chloride (Dichloromethane)       |
| 101688            | Methylene diphenyl diisocyanate (MDI)      |
| 101779            | 4,4-Methylenedianiline                     |
| 91203             | Naphthalene                                |
| 98953             | Nitrobenzene                               |
| 92933             | 4-Nitrobiphenyl                            |
| 100027            | 4-Nitrophenol                              |
| 79469             | 2-Nitropropane                             |
| 684935            | N-Nitroso-N-methylurea                     |
| 62759             | N-Nitrosodimethylamine                     |
| 59892             | N-Nitrosomorpholine                        |
| 56382             | Parathion                                  |
| 82688             | Pentachloronitrobenzene (Quintobenzene)    |
| 87865             | Pentachlorophenol                          |
| 108952            | Phenol                                     |
| 106503            | p-Phenylenediamine                         |
| 75445             | Phosgene                                   |
| 7803512           | Phosphine                                  |
| 7723140           | Phosphorus                                 |
| 85449             | Phthalic anhydride                         |
| 1336363           | Polychlorinated biphenyls (Aroclors)       |
| 1120714           | 1,3-Propane sultone                        |
| 57578             | beta-Propiolactone                         |
| 123386            | Propionaldehyde                            |
| 114261            | Propoxur (Baygon)                          |
| 78875             | Propylene dichloride (1,2-Dichloropropane) |
| 75569             | Propylene oxide                            |
| 75558             | 1,2-Propylenimine (2-Methyl aziridine)     |
| 91225             | Quinoline                                  |
| 106514            | Quinone                                    |
| 100425            | Styrene                                    |
| 96093             | Styrene oxide                              |
| 1746016           | 2,3,7,8-Tetrachlorodibenzo-p-dioxin        |
| 79345             | 1,1,2,2-Tetrachloroethane                  |
| 127184            | Tetrachloroethylene (Perchloroethylene)    |
| 7550450           | Titanium tetrachloride                     |
| 108883            | Toluene                                    |
| 95807             | 2,4-Toluene diamine                        |
| 584849            | 2,4-Toluene diisocyanate                   |
| 95534             | o-Toluidine                                |
| 8001352           | Toxaphene (chlorinated camphene)           |
| 120821            | 1,2,4-Trichlorobenzene                     |
| 79005             | 1,1,2-Trichloroethane                      |
| 79016             | Trichloroethylene                          |



| <b>CAS Number</b> | <b>Chemical Name</b>                           |
|-------------------|--|
| 95954             | 2,4,5-Trichlorophenol                          |
| 88062             | 2,4,6-Trichlorophenol                          |
| 121448            | Triethylamine                                  |
| 1582098           | Trifluralin                                    |
| 540841            | 2,2,4-Trimethylpentane                         |
| 108054            | Vinyl acetate                                  |
| 593602            | Vinyl bromide                                  |
| 75014             | Vinyl chloride                                 |
| 75354             | Vinylidene chloride (1,1-Dichloroethylene)     |
| 1330207           | Xylenes (isomers and mixture)                  |
| 95476             | o-Xylenes                                      |
| 108383            | m-Xylenes                                      |
| 106423            | p-Xylenes                                      |
| 0                 | Antimony Compounds                             |
| 0                 | Arsenic Compounds (inorganic including arsine) |
| 0                 | Beryllium Compounds                            |
| 0                 | Cadmium Compounds                              |
| 0                 | Chromium Compounds                             |
| 0                 | Cobalt Compounds                               |
| 0                 | CokeOven Emissions                             |
| 0                 | Cyanide Compounds{1}                           |
| 0                 | Glycol ethers{2}                               |
| 0                 | Lead Compounds                                 |
| 0                 | Manganese Compounds                            |
| 0                 | Mercury Compounds                              |
| 0                 | Fine mineral fibers{3}                         |
| 0                 | Nickel Compounds                               |
| 0                 | Polycyclic Organic Matter{4}                   |
| 0                 | Radionuclides (including radon){5}             |
| 0                 | Selenium Compounds                             |

NOTE: For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

- {1} X'CN where X = H' or any other group where a formal dissociation may occur. For example KCN or Ca(CN(2)).
- {2} Includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH(2)CH(2))n-OR' where  
n = 1, 2, or 3  
R = alkyl or aryl groups  
R' = R, H, or groups which, when removed, yield glycol ethers with the structure: R-(OCH(2)CH)n-OH. Polymers are excluded from the glycol category.
- {3} Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.
- {4} Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.
- {5} A type of atom which spontaneously undergoes radioactive decay.

## **Appendix 1-4**

### **Sources Deferred From Title V Permitting**

(Source: 6 NYCRR 201-6.8)

Sources Regulated by National Emission Standards for Hazardous Air Pollutants:

- 40 CFR 63.320 Subpart M: Perchloroethylene Dry Cleaning Facilities
- 40 CFR 63.340 Subpart N: Chromium Electroplating
- 40 CFR 63.360 Subpart O: Ethylene Oxide Commercial Sterilization
- 40 CFR 63.460 Subpart T: Halogenated Solvent Metal Cleaning
- 40 CFR 63.541 Subpart X: Secondary Lead Smelting

## **Appendix 1-5**

### **Facility Reporting Thresholds**

[Deleted March 2006]

(NOTE: 6 NYCRR 202-2.1 was revised.)

## **Appendix 1-6**

### **Process Emission Limits Sources Exempted from Process Emissions Requirements**

(Source: 6 NYCRR 212.7)

- Process emission sources which are exempt under section 201-3 (see Appendices 1-1 and 1-2) of this title
- Kilns and clinker coolers in Portland cement plants subject to Part 220 of this title with respect to emissions that are not given an A rating
- Ferrous jobbing foundry melting furnaces in operation on or prior to 6 February 1968, with respect to particulate emissions only
- Byproduct coke oven batteries subject to Part 214 of this title with respect to emissions which are not given an A rating
- Gasoline, petroleum, and volatile organic liquid storage and transfer facilities subject to Part 229 or Part 230 of this title, with respect to volatile organic compound emissions which are not given an A rating
- Process emission sources other than kilns and clinker coolers in a Portland cement plant with respect to opacity of emissions only
- Process emission sources in a sulfuric or nitric acid plant that are regulated by Part 224 of this title with respect to emissions of NO<sub>x</sub>, oxides of sulfur, sulfuric acid mist, and smoke
- Process emission sources in a petroleum refinery subject to Part 223 of this title with respect to sulfur compound emissions and emissions of volatile organic compounds that are not given an A rating
- Process emission sources from which emissions of oxides of sulfur are attributable only to sulfur in fuel with respect to emissions of oxides of sulfur
- Solvent metal cleaning processes subject to Part 226 of this title with respect to emissions of volatile organic compounds which are not given an A rating
- Iron and/or steel processes subject to Part 216 of this title
- Surface coating operations subject to Part 228 of this title or coatings exempt from Part 228 pursuant to section 228.1(h) of this title with respect to emissions of volatile organic compounds that are not given an A rating
- Process emission sources with respect to emissions of CO and volatile organic compounds produced solely by incomplete combustion of any fuel, except where material is heated, burned, combusted or otherwise chemically changed under oxygen-deficient conditions by design
- Perchloroethylene dry cleaning facilities subject to Part 232 of this title
- Pharmaceutical and cosmetic manufacturing processes subject to Part 233 of this title or processes exempt from Part 233 pursuant to section 233.1(g) of this title with respect to emissions of volatile organic compounds which are not given an A rating
- Graphic arts processes subject to Part 234 of this title or inks exempt from Part 234 pursuant to section 234.1(h) of this title with respect to emissions of volatile organic compounds which are not given an A rating
- Primary aluminum reduction plant processes subject to Part 209 of this title with respect to opacity and emissions of total fluorides, and

- Process emission sources with respect to emissions of NO<sub>x</sub> produced by catalytic oxidizers used as air pollution control equipment.

## Appendix 1-7

### Determination of Applicable Emission Standards

(Source: 6 NYCRR 212.5 and 212.9)

- (a) Where air contaminants from two or more devices or contrivances are emitted to the outdoor atmosphere through a single emission point, the permissible emission rate or degree of air cleaning required is determined by using the sum of the process weights or emission rate potentials for all such devices or contrivances.
- (b) Where air contaminants from a single device or contrivance are emitted to the outdoor atmosphere through more than one emission point, the sum of the emissions from all such emission points shall not exceed the quantity that would be permitted if said emissions were through a single emission point.
- (c) Where air contaminants from two or more devices or contrivances are emitted to the outdoor atmosphere through a single emission point and the applicable emission standard for one or more of such devices or contrivances if vented separately to the outdoor atmosphere is a concentration standard (grains per standard cubic foot), the permissible emission rate through such emission point shall not exceed the quantity that would be allowed if said emissions were through separate emission points.
- (d) Where a source owner can demonstrate to the satisfaction of the commissioner that he will apply best available control technology, the commissioner may specify a less restrictive permissible emission rate, emission standard or degree of air cleaning for such source than required under this Part provided that the less restrictive requirement is equivalent to that which can be achieved through the application of best available control technology.
- (e) A process emission source, subject to the Federal new source performance standards in 40 CFR part 60, the national emission standards for hazardous air pollutants in 40 CFR part 61, or to the polychlorinated biphenyl disposal criteria in 40 CFR part 761 satisfies the requirements of this Part for the contaminant regulated by the Federal standard if the source owner can demonstrate that the source is in compliance with the respective Federal regulation.
- (f) Owners and/or operators of facilities which have limited the facility's annual potential to emit nitrogen oxides or volatile organic compounds below applicability levels through federally and state enforceable special conditions in permits to construct and/or certificates to operate under the provisions of section 212.10(d) of this Part must maintain annual actual emissions below these limitations. Nitrogen oxide and volatile organic compound emission points at these facilities are not subject to the control requirements in section 212.9(b) of this Part if the emissions are not given an A rating.

**Table 1: Environmental Rating**

| Rating | Criteria   |
|--------|--|
| A      | An air contaminant whose discharge results or may result in serious adverse effects on receptors or the environment. These effects may be of a health, economic or aesthetic nature or any combination of these.   |
| B      | An air contaminant whose discharge results or may result in only moderate and essentially localized effects or where the multiplicity of sources of the contaminant in any given area would require an overall reduction of the atmospheric burden of that contaminant.  |
| C      | An air contaminant whose discharge may result in localized adverse effects of an aesthetic or nuisance nature.   |
| D      | An air contaminant whose discharge will not result in measurable or observable effects on receptors, nor add to an existing or predictable atmospheric burden of that contaminant which may cause adverse effects, considering properties and concentrations of the emissions, isolated conditions, stack height, and other factors. |

**Table 2: Degree of Air Cleaning Required (Excluding Volatile Organic Compound Emissions in the New York City Metropolitan Area)**

|                      | Emission Rate Potential (lb/h) |  |            |            |            |             |              |              |                       |                    |  |
|----------------------|--------------------------------|--|------------|------------|------------|-------------|--------------|--------------|-----------------------|--------------------|--|
| Environmental Rating | Less than 1.0                  | 1 to 10  | 10 to 20   | 20 to 100  | 100 to 500 | 500 to 1000 | 1000 to 1500 | 1500 to 4000 | 4000 to 10,000        | 10,000 and Greater |  |
| A                    | *                              | 99 percent or Greater or Best Available Control Technology |            |            |            |             |              |              |                       |                    |  |
| B                    | *                              | *  | 90 percent | 91 percent | 94 percent | 96 percent  | 97 percent   | 98 percent   | 99 percent or Greater |                    |  |
| C                    | *                              | *  | 70 percent | 75 percent | 85 percent | 90 percent  | 93 percent   | 95 percent   | 98 percent or Greater |                    |  |
| D                    | No Air Cleaning Required       |  |            |            |            |             |              |              |                       |                    |  |

\* Degree of air cleaning required is specified by the Commissioner.

**Table 3: Degree of Air Cleaning Required in the New York City Metropolitan Area**

| Environmental Rating | Emission Rate Potential (lb/h) |                               |                  |
|----------------------|--------------------------------|-------------------------------|------------------|
|                      | Less than 1.0                  | 1.0 to 3.5                    | Greater than 3.5 |
| A                    | *                              | 99 percent or Greater or BACT |                  |
| B or C               | *                              | *                             | RACT             |
| D                    | No Air Cleaning Required       | No Air Cleaning Required      | RACT             |

\* Degree of air cleaning required will be specified by the Commissioner.

**Table 4: Permissible Emission Rate Based on Process Weight For Solid Particulate Emissions (Environmental Rating B or C)**

| Process Weight Per Hour | Permissible Emission Rate |  |
|-------------------------|---------------------------|--|
|                         | (lb/h)<br>Existing Source | (lb/h)<br>New Source of Modification                 |
| 100                     | 0.51                      | 0.51   |
| 500                     | 1.5                       | 1.5  |
| 1000                    | 2.4                       | 2.4  |
| 5000                    | 6.8                       | 6.8  |
| 10,000                  | 11                        | 11   |
| 25,000                  | 20                        | 20   |
| 50,000                  | 32                        | 32   |
| 75,000                  | 42                        | 42   |
| 100,000                 | 51                        | 51   |
| 250,000                 | 58                        | 0.030 gr/scf of undiluted exhaust gas on a dry basis |
| 500,000                 | 64                        |  |
| 750,000                 | 68                        |  |
| 1,000,000               | 71                        |  |
| 2,000,000               | 78                        |  |
| 3,000,000               | 88                        |  |

**Table 5: Processes for which Permissible Emission Rate is Based on Process Weight**

Stone dryers (asphalt concrete plants)  
Expanded aggregate kilns (lightweight aggregate plants)  
Continuous process material dryers emitting solid particulates and water only  
Brass and bronze melting furnaces  
Ferro alloy production furnaces  
Lime kilns  
Glass production furnaces  
Graphitizing and silicon carbide furnaces  
Gypsum dryers  
Primary aluminum reduction furnaces



## Appendix 1-8

### Permissible Emission Rates for Stationary Combustion Installations Burning Solid Fuel

(Source: 6 NYCRR 227-1.2) [Revised January 2000; Revised January 2001]

| Total heat input<br>(MBtu/h) | Permissible<br>emission rate<br>(MBtu/h) | Total heat input<br>(MBtu/h) | Permissible<br>emission rate<br>(MBtu/h) |
|------------------------------|--|------------------------------|--|
| 1 to 10                      | 0.60                                     | 600                          | 0.24                                     |
| 20                           | 0.52                                     | 700                          | 0.24                                     |
| 30                           | 0.47                                     | 800                          | 0.23                                     |
| 40                           | 0.44                                     | 900                          | 0.22                                     |
| 50                           | 0.42                                     | 1,000                        | 0.22                                     |
| 60                           | 0.41                                     | 2,000                        | 0.19                                     |
| 70                           | 0.39                                     | 3,000                        | 0.17                                     |
| 80                           | 0.38                                     | 4,000                        | 0.16                                     |
| 90                           | 0.37                                     | 5,000                        | 0.15                                     |
| 100                          | 0.36                                     | 6,000                        | 0.15                                     |
| 200                          | 0.31                                     | 7,000                        | 0.14                                     |
| 300                          | 0.29                                     | 8,000                        | 0.14                                     |
| 400                          | 0.27                                     | 9,000                        | 0.13                                     |
| 500                          | 0.25                                     | 10,000                       | 0.13                                     |

\* Installations having a maximum heat input less than 1 MBtu/h are exempted.

\*\* Maximum heat input capacity between 10 - 10,000 MBtu/h: Use  $E = 1.0/p[0.22]$  to determine the permissible emission rate where E = permissible emission rate in lb/MBtu and p = maximum heat input capacity in Mbtu/h.

## Appendix 1-9

### Control Requirements for Major Sources of NO<sub>x</sub>

(Source: 6 NYCRR 227-2.4) [Revised March 2003; Revised March 2003; Revised March 2004]

**Table 1**  
**Very Large Boilers**

(Source: 6 NYCRR 227-2.4(a))

| Presumptive NO <sub>x</sub> RACT limits (lb NO <sub>x</sub> /MBtu)   |                      |      |         |         |
|--|----------------------|------|---------|---------|
| Primary Fuel Type  | Boiler Configuration |      |         |         |
|  | Tangential           | Wall | Cyclone | Stokers |
| Gas Only   | 0.20                 | 0.20 | na      | na      |
| Gas/Oil  | 0.25                 | 0.25 | 0.43    | na      |
| Coal Wet Bottom  | 1.00                 | 1.00 | 0.60    | na      |
| Coal Dry Bottom  | 0.42                 | 0.45 | na      | 0.30*   |
| *This emission limit is 0.33 lb/MBtu when at least 25 percent other solid fuels (e.g., tire derived fuel, waste wood), on a Btu basis, are utilized. |                      |      |         |         |

1. Compliance with this emission limit shall be determined on a 24-h heat input weighted average in accordance with the testing and monitoring provisions of this section (see Appendix 1-10). From October 1st through April 30th, a 30-day rolling heat input weighted average may be used to demonstrate compliance.
2. For very large boilers with configurations other than those listed above, or which are fired primarily with fuels not listed above, the owner/operator must submit, as part of the compliance plan, a proposal for RACT to be implemented that includes:
  - the available NO<sub>x</sub> control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation
  - the technology and the appropriate emission limit selected as RACT considering the costs for installation and operation of the technology.

**Table**  
**2 Large Boilers**

(Source: 6 NYCRR 227-2.4(b))

| Presumptive NO <sub>x</sub> RACT limits (lb NO <sub>x</sub> /MBtu)   |                |
|--|----------------|
| Fuel Type  | Emission Limit |
| Gas Only   | 0.20           |
| Gas/Oil  | 0.30           |
| Pulverized Coal  | 0.50           |
| Coal (Overfeed Stoker)   | 0.30*          |
| *This emission limit is 0.33 lb/MBtu when at least 25 percent other solid fuels (e.g., tire derived fuel, waste wood), on a Btu basis, are utilized. |                |

1. Compliance with this emission limit shall be determined with a 1-h average in accordance with the testing and monitoring provisions of this section (see Appendix 1-10), unless the owner/operator opts to utilize continuous emission monitoring systems (CEMS). If CEMS are utilized, the requirements of section 227-2.6(b) apply, including the use a 24-h averaging period.
2. For large boilers fired primarily with fuels not listed above (e.g., wood), the owner/operator must submit, as part of the compliance plan, a proposal for RACT to be implemented that includes:
  - the available NO<sub>x</sub> control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation
  - the technology selected as RACT considering the costs for installation and operation of the technology.

**Table 3**  
**Mid-Size Boilers**  
 (Source: 6 NYCRR 227-2.4(c))

To comply with NO<sub>x</sub> RACT requirements, the owner/operator of a mid-size boiler must comply with one of two sets of requirements: Emission Limits or Control Technology:

A. Emission Limits:

| <b>Presumptive NO<sub>x</sub> RACT Limits (lb NO<sub>x</sub>/MBtu)</b> |                       |
|--|-----------------------|
| <b>Fuel Type</b>   | <b>Emission Limit</b> |
| Gas Only   | 0.10                  |
| Distillate Oil   | 0.12                  |
| Residual Oil   | 0.30                  |

Compliance with this emission limit shall be determined with a 1-h average in accordance with the testing and monitoring provisions of this section (see Appendix 1-10), unless the owner/operator opts to utilize continuous emission monitoring systems (CEMS). If CEMS are utilized, a 24-h averaging period will be used.

B. Control Technology: By 31 May 1995 owners/operators of mid-size boilers must have in place the following technology:

1. Boilers fired with natural gas, distillate oil or a combination of these fuels must utilize low NO<sub>x</sub> burners.
2. Boilers fired primarily with residual oil must utilize low NO<sub>x</sub> burners and flue gas recirculation utilizing at least 10 percent recirculation.
3. For boilers fired primarily with fuels not listed above, and for boilers where physical constraints make it impossible or impractical to apply the prescribed control technology,, the owner/operator must submit, as part of the compliance plan, a proposal for RACT to be implemented that includes:
  - the available NO<sub>x</sub> control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation
  - the technology and the appropriate emission limit selected as RACT considering the costs for installation and operation of the technology.

**Table 4**  
**Small Boilers**  
 (Source: 6 NYCRR 227-2.4(d))

1. Owners/operators of a small boiler must annually perform a tune-up.
2. Owners/operators must maintain in a permanently bound log book (or other format approved in writing by the Department), the following information:
  - the date of the last tune-up
  - the name, title and affiliation of the person who made the adjustments
  - any other information the Department may require as part of the permit.

**Table 5**  
**Combustion Turbines**  
 (Source: 6 NYCRR Section 227-2.4(e))

Owners/operators of combustion turbines with maximum heat input rates of 10 MBtu/h or greater must comply with the following emission limits:

1. For simple cycle and regenerative combustion turbines: 50 ppm on a dry volume basis (ppmvd), corrected to 15 percent oxygen, for sources designed to burn gas only; and 100 ppmvd corrected to 15 percent oxygen, for sources capable of firing multiple fuels.

2. For combined cycle combustion turbines: 42 ppmvd, corrected to 15 percent oxygen, when firing gas; and 65 ppmvd, corrected to 15 percent oxygen, when firing oil. For sources with a duct burner, compliance will be based on the combination of the turbine and the duct burner when both fire, and the turbine alone when not duct firing.
3. For combustion turbines firing primarily with fuels not listed above the owner/operator submit a proposal for RACT to be implemented that includes:
  - the available NO<sub>x</sub> control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation
  - the technology and the appropriate emission limit selected as RACT considering the costs for installation and operation of the technology.
4. For peaking combustion turbines that operate fewer than 500 h during the period of September 16th to April 30th, the emission limits in paragraphs (1) and (2) above are applicable only during the period May 1st through September 15th.

Compliance with these emission limits shall be determined with a 1 h average in accordance with the testing and monitoring provisions of this section (see Appendix 1-10), unless the owner/operator opts to utilize continuous emission monitoring systems (CEMS). If CEMS are utilized, a 24-h averaging period will be used.

**Table 6**  
**Stationary Internal Combustion Engines**  
 (Source: 6 NYCRR 227-2.4(f))

Owners/operators of a stationary internal combustion engine of 200 hp or larger in the severe ozone nonattainment area, and 400 hp in the rest of the state, which provides primary power or is used for peak shaving generation, must comply with the following emission limits:

1. For rich burn engines, 2.0 g/brake hp-h through March 31, 2005 and 1.5 g/brake hp-h beginning April 1, 2005.
2. For lean burn engines:
  - spark-ignited sources fitting gas
    - 3.0 g/brake hp-h for gas only fired units through March 31, 2005
    - 1.5 g/brake hp-h beginning April 1, 2005
  - compression ignition sources
    - 9.0 g/brake hp-h for units firing other fuels through March 31, 2005
    - 2.3 g/brake hp-h beginning April 1, 2005
  - sources firing landfill gas or digester gas
    - 9.0 g/brake hp-h for units firing other fuels through March 31, 2005
    - 2.0 g/brake hp-h beginning April 1, 2005

Compliance with these emission limits shall be determined with a 1 h average in accordance with the testing and monitoring provisions of this section (see Appendix 1-10), unless the owner/operator opts to utilize continuous emission monitoring systems (CEMS). If CEMS are utilized, a 24-h averaging period will be used.

Any internal combustion engine may utilize an emission limit which reflect a 90 percent of greater NO<sub>x</sub> reduction from the engines' actual 1990 baseline emissions, if such emissions baseline exists.

Emergency power generating stationary internal combustion engines, and engine test cells at engine manufacturing facilities that are utilized for either research and development purposes, reliability testing, or quality assurance performance testing are exempt from the requirements of this subdivision.

**Table 7**  
**Other Combustion Sources**  
(Source: 6 NYCRR 227-2.4(g))

Any owner or operator of a major source of NO<sub>x</sub> or a combustion installation which is part of a facility that is a major source of NO<sub>x</sub>, but is not addressed by a specific subdivision of this section, or is of a source-type not regulated by 6 NYCRR Parts 212, 214, 216, 219, 220 or 224, must submit, as part of the compliance plan, a proposal for RACT to be implemented by 31 May 1995 that includes:

- the available NO<sub>x</sub> control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation for each of the technologies
- the technology and the appropriate emission limit selected as RACT considering the costs for installation and operation of the technology
- testing, monitoring and reporting procedures.

A RACT analysis is not required for combustion installations with an emission rate potential for NO<sub>x</sub> of less than 3.0 lb/h and actual emissions in the absence of control equipment of less than 15.0 lb/day.

## Appendix 1-10

### Testing, Monitoring, and Reporting Requirements

(Source: 6 NYCRR 227-2.6) [Revised January 2000; Revised March 2005]

(a) 'Applicability.' The owner or operator of each source must verify NO<sub>x</sub> emissions by performing the applicable testing procedure detailed below:

- (1) For any very large boiler, NO<sub>x</sub> emissions must be measured with a CEMS as described in subdivision (b) of this section or with an equivalent monitoring system approved by the department.
- (2) For any other combustion installation covered by this subdivision, except those covered under paragraph (5) of this subdivision, NO<sub>x</sub> emissions may be measured with a CEMS as described in subdivision (b) of this section or with an equivalent monitoring system approved by the department in lieu of the monitoring requirements described below.
- (3) For any large boiler, NO<sub>x</sub> emissions must be measured in accordance with emission test requirements described in subdivision (c) of this section.
- (4) For any mid-size boiler complying with the presumptive RACT emission limits in section 227-2.4(c)(2) of this Subpart, NO<sub>x</sub> emissions must be measured in accordance with the emission test requirements described in subdivision (c) of this section.
- (5) For any combined cycle combustion turbine having a maximum heat input rate greater than 250 million Btu per hour, NO<sub>x</sub> emissions must be measured with a CEMS as described in subdivision (b) of this section.
- (6) For any simple cycle, regenerative combustion turbine and any combined cycle combustion turbine having a maximum heat input rate of 250 million Btu per hour or less, NO<sub>x</sub> emissions must be measured in accordance with the emission test requirements as described in subdivision (c) of this section.
- (7) For any stationary internal combustion engine, NO<sub>x</sub> emissions must be measured in accordance with the emission test requirements as described in subdivision (c) of this section.
- (8) For any NO<sub>x</sub> source subject to subdivision 227-2.4(g) of this Subpart NO<sub>x</sub> emissions must be measured pursuant to a testing, monitoring, and reporting protocol that has been proposed by the owner or operator and is consistent with the applicable requirements for sources regulated under this Subpart that have comparable heat input ratings. The proposed protocol is subject to approval by the department and the Administrator.

(b) 'CEMS requirements.'

- (1) The owner or operator of a source subject to paragraph (a)(1), (2) or (5) of this section that is obligated to submit a compliance plan required under section 227-2.3(a) and (b) of this Subpart must submit for department approval:
  - (i) a preliminary CEMS plan as part of the compliance plan if it has a CEMS in place, or are in the process of procuring or installing a CEMS;
  - (ii) a preliminary CEMS plan at least 180 days prior to equipment installation. The Department will notify the owner or operator of the acceptability of the plan, at least 60 days prior to equipment installation if it is not covered under subparagraph (i) of this paragraph; or
  - (iii) a proposed equivalent monitoring plan.
- (2) The owner or operator of a source subject to paragraph (a)(1), (2) or (5) of this section that is obligated to submit a compliance plan required under section 227-2.3(a) and (b) of this Subpart must submit a CEMS certification protocol at least 60 days prior to compliance testing. The location of and specifications for each instrument or device, as well as procedures for calibration, operation, data evaluation and data reporting, must be approved by the department.
- (3) The owner or operator of a source subject to paragraph (a)(1), (2) or (5) of this section must install, calibrate, maintain, and operate a CEMS for measuring NO<sub>x</sub> at locations approved in the CEMS certification protocol under paragraph (2) of this subdivision, and must record the output of each such system. The following procedures and test methods must be used for determining compliance with the appropriate NO<sub>x</sub> emission limit under section 227-2.4 of this Subpart:
  - (i) The owner or operator of a source subject to paragraphs (a)(1) and (2) of this section must:
    - (a') calculate all 24-hour daily heat input-weighted average NO<sub>x</sub> emission rates from block hourly arithmetic emission rate averages calculated by the CEMS and expressed in terms of pounds of NO<sub>x</sub> per million Btu;

- (b) demonstrate compliance with the appropriate emission limit under section 227-2.4 by using a CEMS for measuring NO<sub>x</sub> and calculating a 24-hour daily heat input-weighted average NO<sub>x</sub> emission rate using 40 CFR Part 60, Appendix A, Method 19 for nonturbine sources. A 30-day rolling heat input-weighted average emission rate may be used to demonstrate compliance with the appropriate emission limit under section 227-2.4 of this Subpart from October 1 to April 30 for nonturbine sources; and
  - (c) determine the 24-hour daily heat input-weighted average NO<sub>x</sub> emission rate based on the arithmetic average of the block hourly heat input-weighted average emission rates during each 24 hour daily period from 12:00 midnight to 12:00 midnight the following day using CEMS data. The block hourly heat input-weighted average emission rate must be calculated for each one hour period starting with the period 12:00 midnight to 1:00 am and continuing through until the last period 11:00 pm to 12:00 midnight; or, starting with the period 12:00 noon to 1:00 pm and continuing through the last period 11:00 am to 12:00 noon. The 30 day rolling heat input-weighted average must be the average of the 24 hour daily heat input-weighted NO<sub>x</sub> emission rate for a 30 day period; and
  - (ii) The owner or operator of a source subject to paragraph (a)(5) of this section must calculate:
    - (a) block hourly arithmetic average emission rates using data points generated by CEMS and expressed in terms of parts per million on a dry volume basis, corrected to 15 percent oxygen; and
    - (b) block hourly arithmetic average emission rates for the periods starting 12:00 midnight to 1:00 a.m., 1:00 a.m. to 2:00 a.m., and so on.
  - (iii) At a minimum, valid CEMS data must be obtained for 90 percent of the operating hours in each calendar quarter that the subject facility is operating.
  - (iv) All valid CEMS data must be used in calculating emission rates even if the minimum data requirements of subparagraph (iii) of this paragraph are not met.
  - (v) The procedures under 40 CFR 60.13, Appendix B, Performance Specification 2; and any additional criteria specified by the Department must be followed for the installation, evaluation, and operation of the CEMS.
  - (vi) Annual recertifications, quarterly accuracy, and daily calibration drift tests must be performed in accordance with 40 CFR Part 60, Appendix F. CEM sources subject to 40 CFR part 75 and/or Part 204 of this Title must follow the procedures in those programs, and any additional data requirements determined appropriate by the department.
  - (vii) When NO<sub>x</sub> emission data are not obtained because of CEMS downtime, emission data shall be obtained by using the 90th percentile value of all CEMS NO<sub>x</sub> emission data collected over the last 180 days. Alternatively the owner or operator of a facility subject to part 75 and/or Part 204 may utilize 40 CFR part 75 data substitution procedures for periods when no valid CEMS data is available.
- (4) CEMS recordkeeping and reporting requirements.
- (i) The owner or operator of a source subject to paragraphs (a)(1), (2) and (5) of this section who applies for a permit pursuant to section 227-2.3 of this Subpart must notify the department of the planned initial start-up date.
  - (ii) Protocols, reports, summaries, compliance plans and schedules, and any other information required to be submitted to the Department under provisions of this Subpart must be sent as follows:
    - (a) One copy to the Division of Air Resources, New York State Department of Environmental Conservation, 50 625 Broadway, Albany, New York 12233; and
    - (b) One copy to the regional air pollution control engineer at the appropriate regional office of the Department.
  - (iii) Emissions, monitoring, and operating parameter records or measurements required by this Subpart, quarterly and annual summaries, and any additional parameters required by the department must be maintained for at least three years and made available upon department request within ten working days.
  - (iv) Following each calendar quarter, the owner or operator of a source subject to paragraphs (a)(1), (2) and (5) of this section, must tabulate and summarize applicable emission, monitoring, and operating parameter measurements recorded during the preceding three months (including but not limited to type and amount of fuel burned on a daily basis, heat content of the fuel, total heating value of the fuel consumed on a daily basis, the actual NO<sub>x</sub> emission rate, the allowable NO<sub>x</sub> emission rate and the summation of the sources included in the averaging scheme). These records must be submitted within 30 days following the end of each calendar quarter in a format acceptable to the department, and include:

- (a') the average NOx emission rates as specified under paragraph (b)(3). (For sources covered under paragraphs (a)(1) and (2) of this section, block hourly average emission rates are to be recorded and tabulated, but do not need to be included in the quarterly summaries);
  - (b') identification of the operating hours when NOx emissions data are not included in the calculation of the average emission rate and the reasons for not including that data; and
  - (c') the results of accuracy assessments as required by 40 CFR Part 60, Appendix F and any additional data quality information required by the department.
- (v) The owner or operator of a source subject to paragraphs (a)(1), (2) and (5) must submit the initial compliance test data, the performance evaluation of the CEMS found in 40 CFR Part 60, Appendix B, and the maximum heat input capacity.
- (5) CEMS requirements for sources subject to 40 CFR part 75 and/or Part 204 of this Title. The owner or operator of a source (except those subject to the requirements of section 227-2.6(b)(3)(vii) of this Subpart) subject to the Acid Rain Program monitoring (40 CFR part 75) and/or the NOx Budget Trading Program (Part 204 of this Title) must follow the procedures specified in those programs in order to demonstrate compliance with this Subpart. The owner or operator must, by using the methods described in clause (3)(i)(b') of this subdivision, determine compliance with emission rates that are calculated and reported as 24-hour daily averages.
- (c) 'Emission test requirements.' The owner or operator of a source required to conduct an emission test under subdivision (a) of this section must:
  - (1) Submit a compliance test protocol to the department for approval at least 30 days prior to emission testing. The conditions of the testing and the locations of the sampling devices must be acceptable to the department; and
  - (2) utilize the following procedures set forth in 40 CFR Part 60, Appendix A or any other method acceptable to the department and the Administrator for determining compliance with the appropriate NOx limit in section 227-2.4 of this Subpart, and must, in addition, follow the procedures set forth in Part 202 of this Title:
    - (i) For large and mid-size boilers, utilize Method 7, 7E, or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the department.
    - (ii) For simple cycle combustion turbines, utilize Method 20 from 40 CFR Part 60, Appendix A or another reference method approved by the department.
    - (iii) For combined cycle combustion turbines, utilize Method 7, 7E, 19 or 20 from 40 CFR Part 60, Appendix A or another reference method approved by the department.
    - (iv) For stationary internal combustion engines, utilize Method 7, 7E, or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the department.
  - (3) submit a compliance test report containing the results of the emission test to the department no later than 60 days after completion of the emission test.



## **Appendix 1-11**

### **Particulate Matter Emission Rate for Existing Incinerators, Excluding New York City, Nassau and Westchester Counties**

(Source: 6 NYCRR 219-5.2)

(NOTE: This appendix is in graphic format. If the incinerator's particulate matter emission limits are not contained in its permit, a copy can be obtained from Carolyn O'Rourke at USACERL, 1-800-872-2375.)

## **Appendix 1-12**

### **Particulate Matter Emission Rate for Existing Incinerators, New York City, Nassau and Westchester County** (Source: 6 NYCRR 219-6.2)

(NOTE: This appendix is in graphic format. If the incinerator's particulate matter emission limits are not contained in its permit, a copy can be obtained from Carolyn O'Rourke at USACERL, 1-800-872-2375.)

## Appendix 1-13

### Sulfur-in-Fuel Limitations

(Source: 6 NYCRR 225-1.2(d)) [Revised January 1998]

| Area   | Oil<br>(maximum percent<br>sulfur by weight) | Solid Fuel<br>(pounds of sulfur per MBtu gross<br>heat content) |  |
|--|--|---|--|
|  | Residual                                     | Distillate  |  |
| New York City  | 0.30   | 0.20  | 0.2 MAX                                |
| Nassau, Rockland, and Westchester Counties   | 0.37   | 0.37  | 0.2 MAX                                |
| Suffolk County: Towns of Babylon, Brookhaven,<br>Huntington, Islip, and Smith Town | 1.00   | 1.00  | 0.6 MAX                                |
| Erie County: City of Lackawanna and South<br>Buffalo*                              | 1.10   | 1.10  | 1.7 MAX/1.4 AVG**                      |
| Niagara County and remainder of Erie County  | 1.50   | 1.50  | 1.7 MAX/1.4 AVG**                      |
| Remainder of state   | 1.50   | 1.50  | 2.5 MAX/1.9 AVG**<br>1.7 Annual AVG*** |
|  |  |   |  |

\* South Buffalo is defined as the area in the City of Buffalo south of a line from the intersection of IR 190 and Route 5 and proceeding along IR 190 to the city line.

\*\* Averages are figured by dividing total sulfur content by total gross heat content of all solid fuel received in a consecutive 3-mo period.

\*\*\* Annual averages are figured by dividing total sulfur content by total gross heat content of all solid fuel received during any consecutive 12-mo period.

## Appendix 1-14

### Ventilation Emission Points for Perchloroethylene Dry Cleaning Facilities

(Source: 6 NYCRR 232.6(b)(3) and (6)) [Added January 1998]

1. Existing stand-alone facilities -- retrofitting of equipment.
  - a. Transfer machines -- no retrofitting is allowed. All transfer machines must be removed from service on the following schedule.
    - i. If the process ventilation emission point is located above the roof and more than 25 ft from all openings in nearby occupancies, and if previously retrofitted to meet the less than 100 ppm perc vented emission level (see subparagraph (a)(4)(ii) of this section) and is operating in compliance with that emission level, the equipment must be replaced with third or fourth generation equipment by January 1, 2000.
    - ii. If the process ventilation emission point is located below the roof or less than 25 ft from any opening in a nearby occupancy, or if process ventilation emissions do not meet the 100 ppm perc emission level, the equipment must be replaced with third or fourth generation equipment within six months after the effective date of this Part.
    - iii. Vapor barrier -- not required.
    - iv. General exhaust ventilation system -- Optional.
  - b. Dry-to-dry vented (Second generation)
    - i. Vapor barrier -- Not required.
    - ii. General exhaust ventilation system -- Optional.
    - iii. Process ventilation emission point location:
      - (1) If the process ventilation emission point is above the roof and more than 25 ft from all openings in nearby occupancies, the relocation of the process ventilation emission point is not required.
      - (2) If the process ventilation emission point is below the roof or less than 25 ft from any opening in a nearby occupancy, the process ventilation emission point must be changed to be over the roof and more than 25 ft from all openings in nearby occupancies within six months after the effective date of this Part. Alternatively, the equipment may be replaced with third or fourth generation equipment within the same time limit.
  - iv. Emission controls
    - (1) Controlled
      - (a) If the machine has been controlled with either an azeotropic control device plus small carbon adsorber or converted to a closed-loop third generation machine having an integral or external primary refrigerated condenser (the water cooled condensing system having been eliminated) and has a door fan, meeting the requirements of paragraph (a)(3) of this section, no additional control is required.
      - (b) If the machine is equipped with either a full sized carbon adsorber or a refrigerated condenser with a water cooled condensing system, it must be retrofitted with either an azeotropic control device plus small carbon adsorber (provided EPA publishes a determination that an azeotropic control device is equivalent to a refrigerated condenser), or converted to a closed-loop third generation machine by adding an integral or external primary refrigerated condenser (eliminating the water cooled condensing system) and a door fan with a small carbon adsorber by December 31, 1999. Alternatively, the equipment may be replaced with a third generation machine with a door fan by December 31, 1999, or with a fourth generation by January 1, 2001.
    - (2) Uncontrolled. Equipment must be retrofitted with either an azeotropic control device plus small carbon adsorber (provided EPA publishes a determination that an azeotropic control device is equivalent to a refrigerated condenser), or converted to closed-loop third generation by adding an integral or external primary refrigerated condenser (eliminating the water cooled condensing system) and a door fan with a small carbon adsorber within six months after the effective date of this Part. Alternatively, equipment may be replaced with third or fourth generation equipment within the same time limit.

- v. Fugitive perc emissions from any part of the dry cleaning system, must not exceed 50 ppm at any time.
- c. Dry-to-dry non-vented. Third generation:
  - i. Vapor barrier -- Not Required.
  - ii. General exhaust ventilation system -- Optional.
  - iii. Equipment must be retrofitted with a door fan meeting the requirement of paragraph (a)(3) within four yr after the effective date of this Part; or,
  - iv. An additional option would be to convert this type of equipment to a fourth generation machine that achieves a perc concentration of less than or equal to 300 ppm in the drum within four yr after the effective date of this Part. Under this option a door fan would not be required.
  - v. Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time.
- d. Dry-to-dry non-vented. Fourth generation.
  - i. Vapor barrier -- Not Required.
  - ii. General exhaust ventilation system -- Optional.
  - iii. Primary and secondary control system and drying sensors must meet requirements specified in paragraphs (a)(5) and (6) of this section. However, for non-major facilities that purchased machines prior to the effective date of this Part the following provision applies: If the owner/manager or operator can demonstrate that the machine is operating in the best possible working condition, no action is required if the measured perc concentration in the drum is less than 500 ppm. If the level exceeds 500 ppm, a door fan that meets the requirements of paragraph (a)(3) of this section must be installed by January 1, 2000.
  - iv. Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time
- 2. Existing mixed-use facilities -- retrofitting of equipment.
  - a. Transfer machines. No emission control retrofitting is allowed. All transfer machines must be removed from service on the following schedule.
    - i. If the process ventilation emission point is located above the roof and more than 25 ft from all openings in nearby occupancies, and if the equipment has been previously retrofitted to comply with the less than 100 ppm perc vented emission level (see subparagraph (a)(4)(ii) of this section) and is operating in compliance with that emission level, the equipment must be removed from service by September 22, 1998.
    - ii. If the process ventilation emission point is not above the roof and more than 25 ft from all openings in nearby occupancies, or if the equipment has not previously been retrofitted or is not in compliance with the less than 100 ppm perc emission level (see subparagraph (a)(4)(ii) of this section), the equipment must be removed from service within six months after the effective date of this Part.
    - iii. A vapor barrier and general exhaust ventilation system are required within six months after the effective date of this Part as specified in paragraphs (a)(1) and (2) of this section.
  - b. Dry-to-dry vented. Second generation.
    - i. Vapor barrier and general exhaust ventilation system -- Required within 15 months of the effective date of this Part as specified in paragraphs (a)(1) and (2) of this section.
    - ii. Process vent emission location
      - (1) If the process ventilation emission point is above the roof and more than 25 ft from all openings in nearby occupancies, the relocation of the process ventilation emission point is not required.
      - (2) If the process ventilation emission point is below the roof or less than 25 ft from any opening in a nearby occupancy, change the process ventilation emission point to be over the roof and more than 25 ft from all openings in nearby occupancies within six months after the effective date of this Part. Alternatively, equipment may be replaced with fourth generation equipment within the same time limit.
    - iii. Emission Controls
      - (1) Mixed-use -- commercial -- uncontrolled. Equipment must be retrofitted with either an azeotropic control device plus a small carbon adsorber (provided EPA publishes a determination that an azeotropic control device is equivalent to a refrigerated condenser), or converted to a closed-loop third generation machine by adding an integral or external primary

refrigerated condenser (eliminating the water cooled condensing system) and a door fan as specified in paragraph (a)(3) of this section within six months after the effective date of this Part. Alternatively, equipment may be replaced with fourth generation equipment within the same time limit. The retrofit of this equipment is only an interim measure, and all retrofitted equipment of this type must be removed from service by January 1, 2005.

(2) Mixed-use -- commercial -- controlled.

(a) If the machine has been controlled with either an azeotropic control device plus small carbon adsorber or converted to a third generation machine having an integral or external primary refrigerated condenser (the water cooled condensing system having been eliminated) and has a door fan as specified in paragraph (a)(3) of this section, no interim retrofitting action is required. This equipment must be removed from service and replaced with fourth generation equipment by January 1, 2005.

(b) If the machine is equipped with either a full-sized carbon adsorber or a refrigerated condenser with a water cooled condensing system, it must be retrofitted with either an azeotropic control device plus small carbon adsorber (provided EPA publishes a determination that an azeotropic control device is equivalent to a refrigerated condenser), or converted to a third generation machine by adding an integral or external primary refrigerated condenser (eliminating the water cooled condensing system) and a door fan as specified in paragraph (a)(3) of this section by January 1, 2001. Alternatively, equipment may be replaced with fourth generation equipment by January 1, 2001. The retrofit of this equipment is an interim measure only and all retrofitted equipment must be replaced with fourth generation equipment by January 1, 2005.

(3) Mixed-use -- residential -- uncontrolled. Equipment must be retrofitted with either an azeotropic control device plus small carbon adsorber (provided EPA publishes a determination that an azeotropic control device is equivalent to a refrigerated condenser), or converted to third generation equipment by adding an integral or external primary refrigerated condenser (eliminating the water cooled condensing system) and a door fan as specified in paragraph (b)(3) of this section within six months after the effective date of this Part. Alternatively, the equipment must be replaced with fourth generation equipment within the same time limit. The retrofit of this equipment is only an interim measure and all retrofitted equipment of this type must be removed from service by January 1, 2000.

(4) Mixed-use -- residential -- controlled.

(a) If the machine has been controlled with either an azeotropic control device plus a small carbon adsorber or has been converted to a third generation machine having an integral or external primary refrigerated condenser (the water cooled system having been eliminated) and has a door fan as specified in paragraph 232.6(b)(3) of this section, no additional retrofitting is required. However, all equipment of this type must be replaced with fourth generation equipment by January 1, 2000.

(b) If the machine is equipped with a full-sized carbon adsorber with a water cooled condensing system, it must be operated in compliance with the 100 ppm standards of the previous regulations and must be replaced with fourth generation equipment by January 1, 2000.

iv. Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time.

c. Dry-to-dry non-vented. Third generation

i. Vapor barrier and general exhaust ventilation system -- Required within 18 months of the effective date of this Part as specified in paragraphs 232.6(a)(1) and (2) of this section.

ii. Equipment must be retrofitted with a door fan meeting the requirements of paragraph 232.6(a)(3) of this section within four yr after the effective date of this Part; or, ([c]) An additional option is to convert this piece of equipment to a fourth generation machine that achieves a perc concentration of less than or equal to 300 ppm in the machine drum within four yr after the effective date of this Part. Under this option a door fan would not be required.

iii. Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time.

d. Dry-to-dry non-vented. Fourth generation.

- i. Vapor barrier and general exhaust ventilation system -- Required within two yr of the effective date of this Part as specified in paragraphs 232.6(a)(1) and (2) of this section.
- ii. Primary and secondary controls and drying sensor -- Required as specified in paragraphs 232.6(a)(5) and (6) of this section. However, for non-major facilities that purchased machines prior to the effective date of this Part the following provision applies: If the owner/manager or operator can demonstrate that the machine is operating in the best possible working condition, no action is required if the measured perc concentration in the drum is less than 500 ppm. If the level exceeds 500 ppm, a door fan as specified in paragraph 232.6(a)(3) of this section is required.
- iii. Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time.

## Appendix 1-15

### Public Notice for Perchloroethylene Dry Cleaning Facilities

(Source: 6 NYCRR 232.18) [Added January 1998; Citation Revised March 2008]

New York State Department of Environmental Conservation

#### NOTICE

This dry cleaning facility uses the chemical commonly called perc (it's also called tetrachloroethene, tetrachloroethylene or perchloroethylene).

You may request information from this dry cleaner about inspections that may have been conducted at this facility, including indoor air testing.

You may contact the New York State Department of Environmental Conservation if you smell chemical odors or see liquid leaking from the dry cleaning operations at (include phone number).

If you want more information about indoor air testing or health effects of exposure to perc, call your local health department at (include phone number) or the New York State Department of Health toll free at (include phone number).

Name of dry cleaning facility:

NYSDEC or NYCDEP permit or registration number:

Address of facility:

Owner of facility:

If Emergency, contact:



## Appendix 1-16

### Regulated Coating Lines and Volatile Organic Compound (VOC) Content Limits

(Source: 6 NYCRR 228.1 (e), 228.7, 228.8, and 228.9) [Revised March 2004]

This Appendix consists of 2 tables and a list of exempted coating lines. For any "Process" and "Description of Products" not specifically listed, the Department will determine, based on inspections of the process, emission source, and product to be coated, the maximum permitted pounds of VOC per gallon, minus water and excluded VOC, of coating at application.

**Table 1 (Source: 6 NYCRR 228.7)**

| Process/Emission Source                | Description of Products  | Maximum permitted pounds of VOC per gal of coating at application (minus water and excluded VOC) |
|--|--|--|
| Large Appliance Coating Lines          | Residential and commercial washers, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners.   | 2.8  |
| Magnetic Wire Insulation Coating Lines | Enameling or varnish of aluminum or copper wire for use in electrical machinery to create an electromagnetic field.  | 1.7  |
| Metal Furniture Coating Lines          | Metal parts used in household, business and institutional furniture such as but not limited to tables, chairs, wastebaskets, beds, lighting fixtures, shelves, room dividers, bathroom dividers.   | 3.0  |
| Metal Can Coating Lines                | Sheet basecoat -- exterior and interior over-varnish   | 2.8  |
|  | Two-piece can exterior (basecoat and over-varnish)   | 2.8  |
|  | Two- and three-piece can interior body spray   | 4.2  |
|  | Two-piece can exterior end (spray or roll coat)  | 4.2  |
|  | Three-piece can side-seam spray  | 5.5  |
|  | End sealing compound   | 3.7  |
| Fabric Coating Lines                   | Fabric coatings, such as but not limited to: rubber, used for rainwear, tents, industrial gaskets.   | 2.9  |
| Vinyl Coating                          | Printing, decorations or protecting coats over vinyl-coated lines fabric or vinyl sheets.  | 3.8  |
| Paper Coating Lines                    | Paper, pressure-sensitive tape regardless of substance (including paper, fabric or plastic film) and related web coating processes on plastic film such as but not limited to: typewriter ribbons, photographic film and magnetic tape. Also metal foil gift wrap and packaging. | 2.9  |
| Process/Emission Source                | Description of Products  | Maximum permitted pounds of VOC per gal of coating at application (minus water and excluded VOC) |
| Automobile Assembly Coating Lines      | Automobiles and light-duty trucks, exterior and main body sheet metal parts excluding nonmetallic parts.   |  |
|  | Prime coat   |  |

| Process/Emission Source                                  | Description of Products  | Maximum permitted pounds of VOC per gal of coating at application (minus water and excluded VOC) |
|--|--|--|
|  | Primer-Surfacer<br>Top coats<br>Repair coat  | 1.9<br>2.8<br>2.8<br>4.8   |
| Coil Coating Lines                                       | Flat metal sheet from a coil or roll which is coated and later used for items such as but not limited to: cans, appliances, roof decks, siding, cars, gutters.   | 2.6  |
| Coating Lines for Miscellaneous Metal Parts and Produces | Large farm machinery, small farm and garden machinery, small appliances, commercial and office machinery, computer equipment, industrial machinery, fabricated metal products and any other industrial category which coats miscellaneous metal machinery, instruments or equipment, excluding all nonmetallic parts.<br><br>Clear coatings<br><br>Coating application system is air dried or forced warm air dried at temperature up to 90 °C<br><br>Extreme performance coatings designed for harsh exposure or extreme environmental conditions.<br><br>All other misc. metal parts and products coatings | <br><br>4.3<br><br>3.5<br><br>3.5<br><br>3.0   |
| Coating Lines for Flat Wood Surface Finishing            | Printed interior panels made of hardwood, plywood, and thin particle board<br><br>Natural finish hardwood plywood panels<br><br>Hardboard paneling   | <br><br>2.5<br><br>3.3<br><br>3.6  |

Table 2 (Source: 6 NYCRR 228.8)

| Process/Emission Source | Description of Products   | Maximum permitted pounds of VOC per gal of coating at application (minus water and excluding VOC) |
|-------------------------|---|---|
| Wood Coating Lines      | Coated room furnishings, such as but not limited to cabinets (kitchen, bath and vanity), tables, chairs, beds, sofas, shutters, art objects and any other coated product made of solid wood composition or wood material.<br><br>Semi transparent stain<br>Wash coat<br>Opaque stain<br>Sealer<br>Pigmented coat<br>Clear topcoat | <br><br>6.8<br>6.1<br>4.7<br>5.6<br>5.0<br>5.6  |
| Tablet Coating Lines    | Formed pharmaceutical products, such as but not   | 5.5   |

| Process/Emission Source   | Description of Products  | Maximum permitted pounds of VOC per gal of coating at application (minus water and excluding VOC) |
|---|--|---|
|   | limited to pills, capsules.  |   |
| Glass Coating Lines   | Lamps, incandescent light bulbs and miscellaneous glass products.  | 3.0   |
|   | Fluorescent bulbs  | 4.1   |
| Leather Coating Lines   | Leather substrates, such as but not limited to clothing, furniture, automobile components.   | 5.8   |
| Miscellaneous Plastic Parts Coating Lines   | Plastic parts and products such as but not limited to business and office machine parts, toys, sporting goods, architectural structures such as doors and window frames, automotive interior parts; automotive exterior parts, both flexible and rigid; musical equipment housings; and other miscellaneous plastic parts. |   |
|   | Color topcoat  | 3.8   |
|   | Clear coat   | 4.8   |
| Aerospace Coating Lines   | Aerospace components, including but not limited to assembly of parts or completed unit of any aircraft, helicopter, or missile.  |   |
|   | Primer   | 2.9   |
|   | Topcoat  | 5.1   |
|   | Maskant for chemical processing  | 5.1   |
| Motor Vehicle Refinishing (Effective until Jan 1, 2005)                                       | Automobile, truck or bus coating, including but not limited to repair coats, repainting and touch-ups, except at automobile assembly plants.   |   |
|   | Repair/touchups  | 6.2   |
|   | Overall (coating entire vehicle)   | 5.0   |
| Mobile Equipment Repair and Refinishing or Color-Matched Coating Line (Effective Jan 1, 2005) | Including repainting and repair coats, excluding automotive touch-up repair:   |   |
|   | Automotive pretreatment  | 6.5   |
|   | Automotive primer-surfacer   | 4.8   |
|   | Automotive primer-sealer   | 4.6   |
|   | Automotive topcoat:  |   |
|   | Single stage-topcoat   | 5.0   |
|   | 2 stage basecoat/clearcoat   | 5.0   |
|   | 3 or 4-stage basecoat/clearcoat  | 5.2   |
|   | Multi-colored Automotive   | 5.7   |
|   | Automotive Specialty   | 7.0   |
| Urethane Coating Lines  | Urethane substrates that are more than 50 micrometers (0.002 in.) thick, except for resilient floor covering and flexible packaging.   | 3.8   |

Exceptions:

1. research and development processes involving surface coating which produce a product for study rather than eventual sale

2. adhesives and materials used to prepare a surface for adhesion where the coating is manually applied without the use of mechanical means
3. sealant or filler used to seal or fill seams, joints, holes and minor imperfections of the surface where the coating is manually applied without the use of mechanical means
4. anticorrosive wax and heat resistant anticorrosive coatings uses in the automobile manufacturing industry to protect door opening seam areas and floor pan areas respectively
5. clear or translucent coatings, applied to clear or translucent plastic substrates which are utilized in the manufacture of backlighted outdoor signs
6. coatings which are applied manually with a brush, roller, or an aerosol spray can
7. aerospace coatings which are utilized for pretreatment, adhesive bonding primers, flight testing, fuel tanks, electric/radiation effects, space vehicles, and temporary mechanical maskant/high temperature heat treatment
8. clear and pearlescent coatings applied to plastic fashion items such as beads, buttons, buckles, or other plastic accessories used in the fashion industry;
9. coatings which are applied to optical lens at facilities whose annual potential to emit volatile organic compounds are less than 10 tons
10. reflective coatings applied to highway cones
11. electromagnetic interference/radio frequency interference (EMI/RFI) coatings applied on plastic electronic equipment to provide shielding against electromagnetic interference, radio frequency interference, or static charge
12. electric dissipating coatings that rapidly dissipate a high-voltage electric charge applied on plastic parts
13. low-use specialty coatings where the plantwide total annual usage is equal to or less than 55 gal provided that
  - records must be maintained on an as used basis in a format acceptable to the Commissioner that document the annual usage
  - motor vehicle refinishing coating lines may qualify for this exemption prior to January 1, 2005
  - beginning January 1, 2005, mobile equipment repair and refinishing or color matched coating lines will not qualify for this exemption;
14. mobile equipment repair and refinishing or color-matched coatings applied to mobile equipment or mobile equipment components if the person applying the coatings does not receive compensation
15. powder coatings
16. prior to January 1, 2005, mobile vehicle refinishing where the facility
  - applies coatings using high volume low pressure spraying with a maximum cap pressure of 10.0 psig
  - cleans spray guns using techniques that minimize VOC emissions
  - uses coatings that do not exceed the appropriate VOC content limits
  - exhausts emissions into appropriate emission control equipment
  - applies coatings to work areas that do not exceed 9.0 square feet
  - uses a quantity of coatings and cleaning solvents on an annual basis that does not exceed 55 gallons.
 (NOTE: The owner or operator of the facility must retain for five years records of the quantity of coatings and cleaning solvents used on an annual basis)
17. beginning January 1, 2005, mobile equipment repair and refinishing or color-matched coatings where the facility:
  - applies coatings using high volume low pressure spraying with a maximum cap pressure of 10.0 psig
  - cleans spray guns using techniques that minimize VOC emissions
  - uses coatings that do not exceed the appropriate VOC content limits
  - exhausts emissions into appropriate emission control equipment
  - applies coatings to work areas that do not exceed 9.0 square feet
  - uses a quantity of coatings and cleaning solvents on an annual basis that does not exceed 55 gallons.
 (NOTE: The owner or operator of the facility must retain for five years records of the quantity of coatings and cleaning solvents used on an annual basis.).

## Appendix 1-17

### Motor Vehicle Emissions Standards

(Source: 6 NYCRR 217-1.3(d) and (e)) [Revised January 1998]

#### \*Start-up Standards

#### *Light Duty Vehicles*

| Model Year   | Hydrocarbon (gr/mi) |             | CO (gr/mi)   |              | NO <sub>x</sub> (gr/mi) |
|--------------|---------------------|-------------|--------------|--------------|-------------------------|
|              | Composite           | Phase 2     | Composite    | Phase 2      | Composite               |
| 1994+ Tier 1 | 0.80 - 10.00        | 0.50 - 6.00 | 15.0 - 150.0 | 12.0 - 120.0 | 2.0 - 10.0              |
| 1995         | 1.20 - 10.00        | 0.75 - 6.00 | 20.0 - 150.0 | 16.0 - 120.0 | 2.5 - 10.0              |
| 1994         | 1.20 - 10.00        | 0.75 - 6.00 | 20.0 - 150.0 | 16.0 - 120.0 | 2.5 - 10.0              |
| 1993         | 1.20 - 10.00        | 0.75 - 6.00 | 20.0 - 150.0 | 16.0 - 120.0 | 2.5 - 10.0              |
| 1992         | 1.20 - 10.00        | 0.75 - 6.00 | 20.0 - 150.0 | 16.0 - 120.0 | 2.5 - 10.0              |
| 1991         | 1.20 - 10.00        | 0.75 - 6.00 | 20.0 - 150.0 | 16.0 - 120.0 | 2.5 - 10.0              |
| 1990         | 2.00 - 10.00        | 1.25 - 6.00 | 30.0 - 150.0 | 24.0 - 120.0 | 3.0 - 10.0              |
| 1989         | 2.00 - 10.00        | 1.25 - 6.00 | 30.0 - 150.0 | 24.0 - 120.0 | 3.0 - 10.0              |
| 1988         | 2.00 - 10.00        | 1.25 - 6.00 | 30.0 - 150.0 | 24.0 - 120.0 | 3.0 - 10.0              |
| 1987         | 2.00 - 10.00        | 1.25 - 6.00 | 30.0 - 150.0 | 24.0 - 120.0 | 3.0 - 10.0              |
| 1986         | 2.00 - 10.00        | 1.25 - 6.00 | 30.0 - 150.0 | 24.0 - 120.0 | 3.0 - 10.0              |
| 1985         | 2.00 - 10.00        | 1.25 - 6.00 | 30.0 - 150.0 | 24.0 - 120.0 | 3.0 - 10.0              |
| 1984         | 2.00 - 10.00        | 1.25 - 6.00 | 30.0 - 150.0 | 24.0 - 120.0 | 3.0 - 10.0              |
| 1983         | 2.00 - 10.00        | 1.25 - 6.00 | 30.0 - 150.0 | 24.0 - 120.0 | 3.0 - 10.0              |
| 1982         | 2.00 - 10.00        | 1.25 - 6.00 | 60.0 - 150.0 | 48.0 - 120.0 | 3.0 - 10.0              |
| 1981         | 2.00 - 10.00        | 1.25 - 6.00 | 60.0 - 150.0 | 48.0 - 120.0 | 3.0 - 10.0              |

| Model Year     | Hydrocarbon<br>(ppm at idle) | CO<br>(percent at idle) |
|----------------|------------------------------|-------------------------|
| 1981 and later | 220                          | 1.2                     |
| 1979 - 1980    | 300                          | 2.5                     |
| 1975 - 1978    | 300                          | 3.0                     |
| 19680 - 1974   | 700                          | 6.0                     |

\* Actual exhaust emission standards shall be set by the department during the start-up phase (a period of up to two years) from the range presented. Initially, these standards will be those recommended by the USEPA as contained in Table 1a in bold print (most stringent). Standards listed are based upon the IM240 test. Other test methods may be used but cutpoints used for other tests will be set to yield the same failures as would be realized using the IM240 test. Standards may be changed within the range for each model yr if repair facilities experience significant problems in repairing failed vehicles to meet standards or if actual failure rates vary substantially from those predicted. The department reserves the right to set adjustment factors for non-gasoline or non-diesel fueled vehicles. The department shall publish notice of any changes to the standards in the Environmental Notice Bulletin.

**Light Duty Trucks (6,000 lbs. GVWR or less)**

| Model Year   | Hydrocarbon (gr/mi) |             | CO (gr/mi)    |              | NO <sub>x</sub> (gr/mi) |
|--------------|---------------------|-------------|---------------|--------------|-------------------------|
|              | Composite           | Phase 2     | Composite     | Phase 2      | Composite               |
| 1994+ Tier 1 |                     |             |               |              |                         |
| (~ 3750 LVW) | 0.80 - 10.00        | 0.50 - 6.00 | 15.00 - 150.0 | 12.0 - 120.0 | 2.0 - 10.0              |
| (> 3750 LVW) | 1.00 - 10.00        | 0.63 - 6.00 | 20.0 - 150.0  | 16.0 - 120.0 | 2.5 - 10.0              |
| 1995         | 2.40 - 10.00        | 1.50 - 6.00 | 60.0 - 150.0  | 48.0 - 120.0 | 3.0 - 10.0              |
| 1994         | 2.40 - 10.00        | 1.50 - 6.00 | 60.0 - 150.0  | 48.0 - 120.0 | 3.0 - 10.0              |
| 1993         | 2.40 - 10.00        | 1.50 - 6.00 | 60.0 - 150.0  | 48.0 - 120.0 | 3.0 - 10.0              |
| 1992         | 2.40 - 10.00        | 1.50 - 6.00 | 60.0 - 150.0  | 48.0 - 120.0 | 3.0 - 10.0              |
| 1991         | 2.40 - 10.00        | 1.50 - 6.00 | 60.0 - 150.0  | 48.0 - 120.0 | 3.0 - 10.0              |
| 1990         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 3.5 - 10.0              |
| 1989         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 3.5 - 10.0              |
| 1988         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 3.5 - 10.0              |
| 1987         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 7.0 - 10.0              |
| 1986         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 7.0 - 10.0              |
| 1985         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 7.0 - 10.0              |
| 1984         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 7.0 - 10.0              |
| 1983         | 7.50 - 10.0         | 5.00 - 6.00 | 100.0 - 150.0 | 80.0 - 120.0 | 7.0 - 10.0              |
| 1982         | 7.50 - 10.0         | 5.00 - 6.00 | 100.0 - 150.0 | 80.0 - 120.0 | 7.0 - 10.0              |
| 1981         | 7.50 - 10.0         | 5.00 - 6.00 | 100.0 - 150.0 | 80.0 - 120.0 | 7.0 - 10.0              |

| Model Year     | Hydrocarbon<br>(ppm at idle) | CO<br>(percent at idle) |
|----------------|------------------------------|-------------------------|
| 1981 and later | 220                          | 1.2                     |
| 1979 - 1980    | 300                          | 2.5                     |
| 1975 - 1978    | 300                          | 3.0                     |
| 19680 - 1974   | 700                          | 6.0                     |

**Light Duty Trucks (6,001 - 8,500 lbs. GVWR)**

| Model Year   | Hydrocarbon (gr/mi) |             | CO (gr/mi)    |              | NO <sub>x</sub> (gr/mi) |
|--------------|---------------------|-------------|---------------|--------------|-------------------------|
|              | Composite           | Phase 2     | Composite     | Phase 2      | Composite               |
| 1994+ Tier 1 |                     |             |               |              |                         |
| (~ 5750 LVW) | 1.00 - 10.00        | 0.63 - 6.00 | 20.0 - 150.0  | 16.0 - 120.0 | 2.50 - 10.0             |
| (> 5750 LVW) | 2.40 - 10.00        | 1.50 - 6.00 | 60.0 - 150.0  | 48.0 - 120.0 | 4.0 - 10.0              |
| 1995         | 2.40 - 10.00        | 1.50 - 6.00 | 60.0 - 150.0  | 48.0 - 120.0 | 4.5 - 10.0              |
| 1994         | 2.40 - 10.00        | 1.50 - 6.00 | 60.0 - 150.0  | 48.0 - 120.0 | 4.5 - 10.0              |
| 1993         | 2.40 - 10.00        | 1.50 - 6.00 | 60.0 - 150.0  | 48.0 - 120.0 | 4.5 - 10.0              |
| 1992         | 2.40 - 10.00        | 1.50 - 6.00 | 60.0 - 150.0  | 48.0 - 120.0 | 4.5 - 10.0              |
| 1991         | 2.40 - 10.00        | 1.50 - 6.00 | 60.0 - 150.0  | 48.0 - 120.0 | 4.5 - 10.0              |
| 1990         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 5.0 - 10.0              |
| 1989         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 5.0 - 10.0              |
| 1988         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 5.0 - 10.0              |
| 1987         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 7.0 - 10.0              |
| 1986         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 7.0 - 10.0              |
| 1985         | 3.20 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 7.0 - 10.0              |
| 1984         | 7.50 - 10.00        | 2.00 - 6.00 | 80.0 - 150.0  | 64.0 - 120.0 | 7.0 - 10.0              |
| 1983         | 7.50 - 10.00        | 5.00 - 6.00 | 100.0 - 150.0 | 80.0 - 120.0 | 7.0 - 10.0              |
| 1982         | 7.50 - 10.00        | 5.00 - 6.00 | 100.0 - 150.0 | 80.0 - 120.0 | 7.0 - 10.0              |
| 1981         | 7.50 - 10.00        | 5.00 - 6.00 | 100.0 - 150.0 | 80.0 - 120.0 | 7.0 - 10.0              |

| Model Year     | Hydrocarbon<br>(ppm at idle) | CO<br>(percent at idle) |
|----------------|------------------------------|-------------------------|
| 1981 and later | 220                          | 1.2                     |
| 1979 - 1980    | 300                          | 2.5                     |
| 1975 - 1978    | 300                          | 3.0                     |
| 19680 - 1974   | 700                          | 6.0                     |

**Heavy Duty Trucks (8,500 lbs. GVWR)**

| Model Year     | Hydrocarbon<br>(ppm at idle) | CO<br>(percent at idle) |
|----------------|------------------------------|-------------------------|
| 1979 and later | 300                          | 3.0                     |
| 1974 - 1978    | 600                          | 4.5                     |
| 1970 - 1973    | 700                          | 6.0                     |

## Final Standards

### *Light Duty Vehicles*

| Model Year   | Hydrocarbon (gr/mi) |         | CO (gr/mi) |         | NO <sub>x</sub> (gr/mi) |
|--------------|---------------------|---------|------------|---------|-------------------------|
|              | Composite           | Phase 2 | Composite  | Phase 2 | Composite               |
| 1994+ Tier 1 | 0.60                | 0.40    | 10.0       | 8.0     | 1.5                     |
| 1983 - 1995  | 0.80                | 0.50    | 15.0       | 12.0    | 2.0                     |
| 1981 - 1982  | 0.80                | 0.50    | 30.0       | 24.0    | 2.0                     |

| Model Year     | Hydrocarbon<br>(ppm at idle) | CO<br>(percent at idle) |
|----------------|------------------------------|-------------------------|
| 1981 and later | 220                          | 1.2                     |
| 1979 - 1980    | 300                          | 2.5                     |
| 1975 - 1978    | 300                          | 3.0                     |
| 1968 - 1974    | 700                          | 6.0                     |

### *Light Duty Trucks (6,000 lbs. GVWR or less)*

| Model Year   | Hydrocarbon (gr/mi) |         | CO (gr/mi) |         | NO <sub>x</sub> (gr/mi) |
|--------------|---------------------|---------|------------|---------|-------------------------|
|              | Composite           | Phase 2 | Composite  | Phase 2 | Composite               |
| 1994+ Tier 1 |                     |         |            |         |                         |
| (~ 3750 LVW) | 0.60                | 0.40    | 10.0       | 8.0     | 1.5                     |
| (> 3750 LVW) | 0.80                | 0.50    | 13.0       | 10.0    | 1.8                     |
| 1988 - 1995  | 1.60                | 1.00    | 40.0       | 32.0    | 2.5                     |
| 1984 - 1987  | 1.60                | 1.00    | 40.0       | 32.0    | 4.5                     |
| 1981 - 1983  | 3.40                | 2.00    | 70.0       | 56.0    | 4.5                     |

| Model Year     | Hydrocarbon<br>(ppm at idle) | CO<br>(percent at idle) |
|----------------|------------------------------|-------------------------|
| 1981 and later | 220                          | 1.2                     |
| 1979 - 1980    | 300                          | 2.5                     |
| 1975 - 1978    | 300                          | 3.0                     |
| 1968 - 1974    | 700                          | 6.0                     |



***Light Duty Trucks (6,001 - 8,500 lbs. GVWR)***

| Model Year   | Hydrocarbon (gr/mi) |         | CO (gr/mi) |         | NO <sub>x</sub> (gr/mi) |
|--------------|---------------------|---------|------------|---------|-------------------------|
|              | Composite           | Phase 2 | Composite  | Phase 2 | Composite               |
| 1994+ Tier 1 |                     |         |            |         |                         |
| (~ 5750 LVW) | 0.80                | 0.50    | 13.0       | 10.0    | 1.8                     |
| (> 5750 LVW) | 0.80                | 0.50    | 15.0       | 12.0    | 2.0                     |
| 1988 - 1995  | 1.60                | 1.00    | 40.0       | 32.0    | 3.5                     |
| 1984 - 1987  | 1.60                | 1.00    | 40.0       | 32.0    | 4.5                     |
| 1981 - 1983  | 3.40                | 2.00    | 70.0       | 56.0    | 4.5                     |

| Model Year     | Hydrocarbon<br>(ppm at idle) | CO<br>(percent at idle) |
|----------------|------------------------------|-------------------------|
| 1981 and later | 220                          | 1.2                     |
| 1979 - 1980    | 300                          | 2.5                     |
| 1975 - 1978    | 300                          | 3.0                     |
| 1968 - 1974    | 700                          | 6.0                     |

***Heavy Duty Trucks (over 8,500 lbs. GVWR)***

| Model Year     | Hydrocarbon<br>(ppm at idle) | CO<br>(percent at idle) |
|----------------|------------------------------|-------------------------|
| 1979 and later | 300                          | 3.0                     |
| 1974 - 1978    | 600                          | 4.5                     |
| 1970 - 1973    | 700                          | 6.0                     |

## **Appendix 1-18**

### **Emission Standards for Clean Fuel Fleet Vehicles**

[Deleted March 2004]

(NOTE: 6 NYCRR 210-4 repealed.)

## Appendix 1-19

### VOC Content Limits for Architectural Coatings

(Source: 6 NYCRR 205.3) [Citation Revised January 1998; Citation Revised March 2006]

| Coating Category                                       | VOC content limit<br>(grams per liter)' |
|--|---|
| Flat coatings  | 100                                     |
| Nonflat coatings                                       | 150                                     |
| Nonflat - high gloss coatings                          | 250                                     |
| Antenna coatings                                       | 530                                     |
| Antifouling coatings                                   | 400                                     |
| Bituminous roof coatings                               | 300                                     |
| Bituminous roof primers                                | 350                                     |
| Bond breakers  | 350                                     |
| Calcimine recoaters                                    | 475                                     |
| Clear wood coatings                                    |   |
| * Clear brushing lacquers                              | 680                                     |
| * Lacquers (including lacquer sanding sealers)         | 550                                     |
| * Sanding sealers (other than lacquer sanding sealers) | 350                                     |
| * Varnishes  | 350                                     |
| * Conversion varnishes                                 | 725                                     |
| Concrete curing compounds                              | 350                                     |
| Concrete surface retarders                             | 780                                     |
| Dry fog coatings                                       | 400                                     |
| Faux finishing coatings                                | 350                                     |
| Fire resistive coatings                                | 350                                     |
| Fire-retardant coatings                                |   |
| * Clear  | 650                                     |
| * Opaque   | 350                                     |
| Floor coatings   | 250                                     |
| Flow coatings  | 420                                     |
| Form-release compounds                                 | 250                                     |
| Graphic arts coatings (sign paints)                    | 500                                     |
| High temperature coatings                              | 420                                     |
| Impacted immersion coatings                            | 780                                     |
| Industrial maintenance coatings                        | 340                                     |
| Low solids coatings                                    | 120                                     |
| Magnesite cement coatings                              | 450                                     |
| Mastic texture coatings                                | 300                                     |
| Metallic pigmented coatings                            | 500                                     |
| Multi-color coatings                                   | 250                                     |
| Nuclear coatings                                       | 450                                     |
| Pre-treatment wash primers                             | 420                                     |
| Primers, sealers, and undercoaters                     | 200                                     |
| Quick-dry enamels                                      | 250                                     |
| Quick-dry primers, sealers and undercoaters            | 200                                     |
| Recycled coatings                                      | 250                                     |
| Roof coatings  | 250                                     |

| <b>Coating Category</b>  | <b>VOC content limit<br/>(grams per liter)'</b> |
|--|---|
| Rust preventive coatings   | 400   |
| Shellacs:  |   |
| * Clear  | 730   |
| * Opaque   | 550   |
| Specialty primers, sealers, and undercoaters                             | 350   |
| Stains   | 250   |
| Swimming pool coatings and swimming pool repair and maintenance coatings | 340   |
| Temperature-indicator safety coatings                                    | 550   |
| Thermoplastic rubber coatings and mastics                                | 550   |
| Traffic marking coatings   | 150   |
| Waterproofing sealers  | 250   |
| Waterproofing concrete/masonry sealers                                   | 400   |
| Wood preservatives   | 350   |

Limits are expressed in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint basis. Manufacturer's maximum recommendation means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

If anywhere on the container of any architectural coating, or any label sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on the manufacturer's behalf, including retailers who sell under a private label, representation is made that the coating meets the definition of or is recommended for use or may be used for more than one of the coating categories listed in subdivision (a) of this section, then the most restrictive VOC content limit shall apply. This provision does not apply to the coating categories listed below in paragraphs (1)-(19) of this subdivision:

- (1) lacquer coatings (including lacquer sanding sealers)
- (2) metallic pigmented coatings
- (3) shellacs
- (4) fire-retardant coatings
- (5) pretreatment wash primers
- (6) industrial maintenance coatings
- (7) low-solids coatings
- (8) wood preservatives
- (9) high temperature coatings
- (10) temperature-indicator safety coatings
- (11) antenna coatings
- (12) antifouling coatings
- (13) flow coatings
- (14) bituminous roof primers
- (15) thermoplastic rubber coatings and mastics
- (16) specialty primers, sealers, and undercoaters
- (17) calcimine recoaters
- (18) impacted immersion coatings
- (19) nuclear coatings.

For any coating that does not meet any of the definitions for the specialty coatings categories listed in subdivision (a) of this section, the VOC content limit shall be determined by classifying the coating as a flat coating, nonflat coating, or nonflat-high gloss coating as those terms are defined in sections 205.2(x), (am) and (an) of this Part and the corresponding flat or nonflat coating limit shall apply.

## Appendix 1-20

### Gas Cap Integrity Test

(Source: 6 NYCRR 217-1.3, Table 2.) [Added March 2003]

| <u>Model Year</u> | <u>Initial System Pressure</u> | <u>Standard</u>                              |
|-------------------|--------------------------------|--|
| 1968 and later    | 30 $\pm$ 1 inches of water     | Leak rate of less than or equal to 60 cc/min |

## Appendix 1-21

### Pollutants Regulation Under Section 112(r) of the Act (6 NYCRR 200.1(bk)) [Added January 2002; Citation Revised March 2006]

The list of pollutants regulated under section 112(r) of the Act as of the effective date of this part:

| CAS Number  | Chemical Name   |
|-------------|---|
| 000075-07-0 | Acetaldehyde  |
| 000074-86-2 | Acetylene [Ethyne]                                    |
| 000107-02-8 | Arolein [2-Propenal]                                  |
| 000107-13-1 | Acrylonitrile [2-Propenenitrile]                      |
| 000814-68-6 | Acrylyl chloride [2-Propenoyl chloride]               |
| 000107-18-6 | Allyl alcohol [2-Propen-1-ol]                         |
| 000107-11-9 | Allylamine [2-Propen-1-amine]                         |
| 007664-41-7 | Ammonia (anhydrous)                                   |
| 007664-41-7 | Ammonia (conc 20 percent or greater)                  |
| 007784-34-1 | Arsenous trichloride                                  |
| 007784-42-1 | Arsine  |
| 010294-34-5 | Boron trichloride [Borane, trichloro-]                |
| 007637-07-2 | Boron trifluoride [Borane, trifluoro-]                |
| 000353-42-4 | Boron trifluoride compound with methyl ether (1:1)    |
| 007726-95-6 | Bromine   |
| 000598-73-2 | Bromotrifluorethylene [Ethene, bromotrifluoro-]       |
| 000106-99-0 | 1,3-Butadiene   |
| 000106-97-8 | Butane  |
| 025167-67-3 | Butene  |
| 000106-98-9 | 1-Butene  |
| 000107-01-7 | 2-Butene  |
| 000590-18-1 | 2-Butene-cis  |
| 000624-64-6 | 2-Butene-trans [2-Butene, (E)]                        |
| 000075-15-0 | Carbon disulfide                                      |
| 000463-58-1 | Carbon oxysulfide [Carbon oxide sulfide (COS)]        |
| 007782-50-5 | Chlorine  |
| 010049-04-4 | Chlorine dioxide [Chlorine oxide (ClO <sub>2</sub> )] |
| 007791-21-1 | Chlorine monoxide [Chlorine oxide]                    |
| 000067-66-3 | Chloroform [Methane, trichloro-]                      |
| 000542-88-1 | Chloromethyl ether [Methane, oxybis chloro-]          |
| 000107-30-2 | Chloromethyl methyl ether [Methane, chloromethoxy-]   |
| 000590-21-6 | 1-Chloropropylene [1-Propene, 1-chloro-]              |
| 000557-98-2 | 2-Chloropropylene [1-Propene, 2-chloro-]              |
| 004170-30-3 | Crotonaldehyde [2-Butenal]                            |
| 000123-73-9 | Crotonaldehyde, (E)- [2-Butenal, (E)-]                |
| 000460-19-5 | Cyanogen [Ethanedinitrile]                            |
| 000506-77-4 | Cyanogen chloride                                     |
| 000108-91-8 | Cyclohexylamine [Cyclohexanamine]                     |
| 000075-19-4 | Cyclopropane  |
| 019287-45-7 | Diborane  |
| 004109-96-0 | Dichlorosilane [Silane, dichloro-]                    |
| 000075-37-6 | Difluoroethane [Ethane, 1,1-difluoro-]                |
| 000124-40-3 | Dimethylamine [Methanamine, N-methyl-]                |
| 000075-78-5 | Dimethyldichlorosilane [Silane, dichlorodimethyl-]    |
| 000057-14-7 | 1,1-Dimethylhydrazine [Hydrazine, 1,1-dimethyl-]      |

| CAS Number  | Chemical Name  |
|-------------|--|
| 000463-82-1 | 2,2-Dimethylpropane [Propane, 2,2-dimethyl]  |
| 000106-89-8 | Epichlorohydrin [Oxirane, (chloromethyl)-]   |
| 000074-84-0 | Ethane   |
| 000107-00-6 | Ethyl acetylene [1-Butyne]   |
| 000075-04-7 | Ethylamine [Ethanamine]  |
| 000075-00-3 | Ethyl chloride [Ethane, chloro-]   |
| 000074-85-1 | Ethylene [Ethene]  |
| 000107-15-3 | Ethylenediamine [1,2-Ethanediamine]  |
| 000151-56-4 | Ethyleneimine [Aziridine]  |
| 000075-21-8 | Ethylene oxide [Oxirane]   |
| 000060-29-7 | Ethyl ether [Ethane, 1,1 -oxybis-]   |
| 000075-08-1 | Ethyl mercaptan [Ethanethiol]  |
| 000109-95-5 | Ethyl nitrite [Nitrous acid, ethyl ester]  |
| 007782-41-4 | Fluorine   |
| 000050-00-0 | Formaldehyde (solution)  |
| 000110-00-9 | Furan  |
| 000302-01-2 | Hydrazine  |
| 007647-01-0 | Hydrochloric acid (conc 37 percent or greater)                                       |
| 000074-90-8 | Hydrocyanic acid   |
| 001333-74-0 | Hydrogen   |
| 007647-01-0 | Hydrogen chloride (anhydrous) [Hydrochloric acid]                                    |
| 007664-39-3 | Hydrogen fluoride/Hydrofluoric acid (conc 50 percent or greater) [Hydrofluoric acid] |
| 007783-07-5 | Hydrogen selenide  |
| 007783-06-4 | Hydrogen sulfide   |
| 013463-40-6 | Iron, pentacarbonyl- [Iron carbonyl (Fe(CO) <sub>5</sub> ), (TB-5-1 1)-]             |
| 000075-28-5 | Isobutane [Propane, 2-methyl]  |
| 000078-82-0 | Isobutyronitrile [Propanenitrile, 2-methyl-]   |
| 000078-78-4 | Isopentane [Butane, 2-methyl-]   |
| 000078-79-5 | Isoprene [1,3 -Butadiene, 2-methyl-]   |
| 000075-31-0 | Isopropylamine [2-Propanamine]   |
| 000108-23-6 | Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]                 |
| 000075-29-6 | Isopropyl chloride [Propane, 2-chloro-]  |
| 000126-98-7 | Methacrylonitrile [2-Propenenitrile, 2-methyl-]                                      |
| 000074-82-8 | Methane  |
| 000074-89-5 | Methylamine [Methanamine]  |
| 000563-46-2 | 2-Methyl-1-butene  |
| 000563-45-1 | 3-Methyl-1-butene  |
| 000074-87-3 | Methyl chloride [Methane, chloro-]   |
| 000079-22-1 | Methyl chloroformate [Carbonochloridic acid, methyl ester]                           |
| 000115-10-6 | Methyl ether [Methane, oxybis-]  |
| 000107-31-3 | Methyl formate [Formic acid, methyl ester]   |
| 000060-34-4 | Methyl hydrazine [Hydrazine, methyl-]  |
| 000624-83-9 | Methyl isocyanate [Methane, isocyanato-]   |
| 000115-11-7 | 2-Methylpropene [1-Propene, 2-methyl-]   |
| 000556-64-9 | Methyl thiocyanate [Thiocyanic acid, methyl ester]                                   |
| 000075-79-6 | Methyltrichlorosilane [Silane, trichloromethyl-]                                     |
| 013463-39-3 | Nickel carbonyl  |
| 007697-37-2 | Nitric acid (conc 80 percent or greater)   |
| 010102-43-9 | Nitric oxide [Nitrogen oxide (NO)]   |
| 008014-95-7 | Oleum (Fuming Sulfuric acid) [Sulfuric acid mixture with sulfur trioxide]            |

| CAS Number  | Chemical Name  |
|-------------|--|
| 000504-60-9 | 1,3-Pentadinene  |
| 000109-66-0 | Pentane  |
| 000109-67-1 | 1-Pentene  |
| 000646-04-8 | 2-Pentene, (E)-  |
| 000627-20-3 | 2-Pentene, (Z)-  |
| 000079-21-0 | Peracetic acid [Ethaneperoxoic acid]   |
| 000594-42-3 | Perchloromethylmercaptan [Methanesulphenyl chloride, trichloro-]             |
| 000075-44-5 | Phosgene [Carbonic dichloride]   |
| 007803-51-2 | Phosphine  |
| 010025-87-3 | Phosphorus oxychloride [Phosphoryl chloride]                                 |
| 007719-12-2 | Phosphorus trichloride [Phosphorous trichloride]                             |
| 000110-89-4 | Piperidine   |
| 000463-49-0 | Propadiene [1,2-Propadiene]  |
| 000074-98-6 | Propane  |
| 000107-12-0 | Propionitrile [Propanenitrile]   |
| 000109-61-5 | Propyl chloroformate [Carbonochloridic acid, propylester]                    |
| 000115-07-1 | Propylene [1-Propene]  |
| 000075-55-8 | Propyleneimine [Aziridine, 2-methyl-]  |
| 000075-56-9 | Propylene oxide [Oxirane, methyl-]   |
| 000074-99-7 | Propyne [1-Propyne]  |
| 007803-62-5 | Silane   |
| 007446-09-5 | Sulfur dioxide (anhydrous)   |
| 007783-60-0 | Sulfur tetrafluoride [Sulfur fluoride (SF <sub>4</sub> ), (T-4)-]            |
| 007446-11-9 | Sulfur trioxide  |
| 000116-14-3 | Tetrafluoroethylene [Ethene, tetrafluoro-]                                   |
| 000075-74-1 | Tetramethyllead [Plumbane, tetramethyl-]                                     |
| 000075-76-3 | Tetramethylsilane [Silane, tetramethyl-]                                     |
| 000509-14-8 | Tetranitromethane [Methane, tetranitro-]                                     |
| 007550-45-0 | Titanium tetrachloride [Titanium chloride (TiCl <sub>4</sub> ) (T-4)-]       |
| 000584-84-9 | Toluene 2,4-diisocyanate [Benzene, 2,4-diisocyanato-1-methyl-]               |
| 000091-08-7 | Toluene 2,6-diisocyanate [Benzene, 1,3-diisocyanato-2-methyl-]               |
| 026471-62-5 | Toluene diisocyanate (unspecified isomer) [Benzene, 1,3-diisocyanatomethyl-] |
| 010025-78-2 | Trichlorosilane [Silane, trichloro-]   |
| 000079-38-9 | Trifluorochloroethylene [Ethene, chlorotrofluoro-]                           |
| 000075-50-3 | Trimethylamine [Methanamine, N,N-dimethyl-]                                  |
| 000075-77-4 | Trimethylchlorosilane [Silane, chlorotrimethyl-]                             |
| 000108-05-4 | Vinyl acetate monomer [Acetic acid ethenyl ester]                            |
| 000689-97-4 | Vinyl acetylene [1-Buten-3-yne]  |
| 000075-01-4 | Vinyl chloride [Ethene, chloro-]   |
| 000109-92-2 | Vinyl ethyl ether [Ethene, ethoxy-]  |
| 000075-02-5 | Vinyl fluoride [Ethene, fluoro-]   |
| 000075-35-4 | Vinylidene chloride [Ethene, 1, 1-dichloro-]                                 |
| 000075-38-7 | Vinylidene fluoride [Ethene, 1, 1-difluoro-]                                 |
| 000107-25-5 | Vinyl methyl ether [Ethene, methoxy-]  |



## **SECTION 2**

### **CULTURAL RESOURCES MANAGEMENT**

#### **New York Supplement, March 2010**

This section covers state requirements for the management of cultural and historic resources and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

New York has no separate, relevant requirements regarding cultural and historic resources management.

| <b>CULTURAL RESOURCES MANAGEMENT<br/>GUIDANCE FOR NEW YORK CHECKLIST USERS</b> |            |
|--|------------|
| <b>REFER TO CHECKLIST ITEMS:</b>   |            |
| Missing Checklist Items  | CR.2.1.NY. |

| <b>COMPLIANCE CATEGORY:</b><br><b>CULTURAL RESOURCES MANAGEMENT</b><br><b>New York Supplement</b>  |   |
|--|---|
| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>CR.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>CR.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |



## SECTION 3

### HAZARDOUS MATERIALS MANAGEMENT

#### New York Supplement, March 2010

This section covers the state requirements for Hazardous Materials Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Aboveground Storage Tank* - any stationary tank with a capacity of 185 gal or more which is not entirely covered with earth or other backfill material, or any stationary tank with a capacity of 180 gal or more which can be inspected in a subterranean vault (Codes, Rules, and Regulations of the State of New York, Title 6, Chapter V, Subchapter D, Part 596, Section 596.1 (6 NYCRR 596.1)).
- *Ancillary Equipment* - any device including, but not limited to, piping, fittings, fixtures, gauges, alarms, rupture disks, pressure release valves, flanges, valves, and pumps that are used to distribute, meter, or control the flow of hazardous substances to or from a storage tank (6 NYCRR 595.1).
- *Capacity* - the total volume of the tank measured in U.S. gallons, unless otherwise specified (6 NYCRR 596.1).
- *Continuous* - when referring to a release, a release which occurs without interruption or abatement or that is routine, anticipated, and intermittent and incidental to normal operations (6 NYCRR 595.1).
- *Department* - the New York State Department of Environmental Conservation (6 NYCRR 595.1).
- *Environment* - any water, water vapor, land including land surface or subsurface, air, fish, wildlife, biota, and all other natural resources (6 NYCRR 596.1).
- *Hazardous Substance* - any substance listed as a hazardous substance in Part 597 (see Appendix 3-1) or a mixture thereof. Petroleum (see definition) and hazardous wastes as identified or listed in Part 371 of this Title are not hazardous substances for the purposes of this Part (6 NYCRR 595.1 and 596.1) [Revised March 2010].
- *Mixture* - a heterogeneous association of substances where the various individual substances retain their essential original properties. The term “mixture” includes solutions (but does not include alloys or amalgams) where one or more active ingredients are hazardous substances. Mixtures regulated under 6 NYCRR 595 are mixtures which contain a hazardous substance, or combination thereof, in quantities of 1 percent or more by volume or weight (6 NYCRR 595.1).
- *Nonstationary Tank* - any tank, barrel, drum, or other holding vessel which is mobile in design or practice and which is used to store 1000 kg (2200 lb) or more of a hazardous substance, or mixture thereof, for a period of 90 consecutive days or more. This includes tanks on wheels, trolleys, skids, pallets, and rollers (6 NYCRR 596.1).
- *Overfill* - a release or spill that occurs when a storage tank is filled beyond its capacity (6 NYCRR 595.1).
- *Permanently Closed* - an out-of-service storage tank which has been emptied of all product and residual materials, cleaned, rendered free of any hazardous or flammable vapors, disconnected from any process or dispensing units and closed or converted to another purpose consistent with Department standards for closure (6 NYCRR 596.1) [Citation Revised March 2010].

- *Petroleum* - oil or petroleum of any kind and in any form including, but not limited to, oil, petroleum fuel oil, oil sludge, oil refuse, oil mixed with other waste, crude oil, gasoline and kerosene (6 NYCRR 597.1).
- *Piping or Piping System* - a fixed or permanent pipe including attached equipment and components used to convey, distribute, mix, separate, discharge, meter, control, or stop the flow of a hazardous substance to or from a storage tank (6 NYCRR 596.1).
- *Release* - any unauthorized pumping, pouring, emitting, emptying, overfilling, spilling, leaking, leaching, or disposing, directly or indirectly, of a hazardous substance or any other substance which results in the formation of a hazardous substance upon release so that the substance, or any related constituent thereof, or any degradation product of such a substance or of a related constituent thereof, may enter the environment (6 NYCRR 595.1).
- *Repair* - the work necessary to restore a storage tank or component to a safe and satisfactory operating condition provided that in all cases the storage tank or component design must continue to comply with the requirements herein, that special service requirements do not restrict such work, and the basic design concept is not altered (6 NYCRR 596.1).
- *Reportable Quantity* - the amount of a hazardous substance that must be reported to the Department in the event of a release, spill, or overfill. The reportable quantity for mixtures is the amount of the hazardous substance components of a mixture. Reportable quantities are listed in 6 NYCRR 597.2 or 40 CFR 302 (see Appendix 3-1 of this manual, and Appendix 3-1 of the TEAM Guide) (6 NYCRR 595.1).
- *Secondary Containment* -
  1. containment which prevents any material released from reaching the land or water outside the containment area before clean-up occurs (6 NYCRR 595.1)
  2. a dike, remote impoundment, or any other containment area which protects a tank, pipe, or transfer station from damage due to vehicle traffic, fire exposure, spills from nearby tanks and which prevents any material spilled or released from reaching the land or water outside the containment area before clean-up occurs (6 NYCRR 596.1).
- *Spill or Spillage* - any escape of a substance from the containers employed in the normal course of storage, transfer, processing, or use (6 NYCRR 595.1).
- *Stable in Quantity and Rate* - a release which is predictable and regular in the amount and rate of emission (6 NYCRR 595.1).
- *Stationary Tank* - any underground tank or any aboveground tank which is stationary in either practice or design. Examples of stationary aboveground tanks include tanks which may rest on the ground or may be in permanent operation or fixed permanently in place on foundations, racks, cradles, or stilts. A stationary tank includes any aboveground container, barrel tank car, drum, or other holding vessel with a capacity of 185 gal or more that is connected to piping for a period of 90 days or more (6 NYCRR 596.1).
- *Storage Tank System or Storage Tank* - an aboveground tank, an underground tank, or a nonstationary tank, and any associated piping, lines, dikes, curbs, transfer stations, and ancillary equipment (6 NYCRR 595.1).
- *Substantially Modified* - an existing storage facility that has been modified in one or more of the following ways:
  1. a new stationary tank added to the site
  2. an existing stationary tank is replaced, reconditioned or permanently closed
  3. a leaking tank is replaced, repaired or permanently closed (6 NYCRR 595.1).
 (NOTE: The repair, replacement, or installation of the piping system or ancillary equipment is not considered a substantial modification unless due to a reportable release.)

- *Tank* - a container or other holding vessel designed to store a hazardous substance which is constructed of nonearthen materials (e.g., concrete, steel, plastic) which provide structural support (6 NYCRR 595.1).
- *Underground Tank* - any tank completely covered with earth or other material. Tanks in subterranean vaults accessible for visual inspection are considered aboveground tanks (6 NYCRR 595.1).
- *Waters or Waters of the State* - include lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial limits of the State of New York, and all other bodies of surface or underground waters, natural or artificial inland or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction (6 NYCRR 596.1).

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| <p align="center"><b>HAZARDOUS MATERIALS MANAGEMENT<br/>GUIDANCE FOR NEW YORK CHECKLIST USERS</b></p> |  |
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| <p align="center"><b>REFER TO CHECKLIST ITEMS:</b></p> |  |
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|   |                                 |
|---|---------------------------------|
| Missing Checklist Items                         | HM.2.1.NY.                      |
| State Specific Hazardous Materials Requirements | HM.5.1.NY.                      |
| Releases of Hazardous Materials                 | HM.20.1.NY. through HM.20.6.NY. |
| Hazardous Materials Transportation              | [Deleted]                       |

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| <p align="center"><b>GUIDANCE FOR APPENDIX USERS</b></p> |  |
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| <b>REFER TO APPENDIX NUMBERS:</b> | <b>REFER TO APPENDIX TITLES:</b> |
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| 3-1 | Hazardous Substance List |
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| 3-1 | Hazardous Substance List |
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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>HM.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>HM.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

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| <p><b>HM.5.</b></p> <p><b>STATE SPECIFIC<br/>HAZARDOUS<br/>MATERIALS<br/>REQUIREMENTS</b></p> <p><b>HM.5.1.NY.</b> Stationary aboveground and underground storage tanks that contain hazardous substances must meet registration, design, and management requirements (6 NYCRR 596.1(b) and 596.2) [Added March 2010].</p> | <p>Verify that aboveground and underground storage tanks that contain hazardous substances meet the applicable requirement in ST.155.1.NY. through ST.155.36.NY.</p> <p>(NOTE: See the requirements of HM.20 and the listed hazardous substances found in Appendix 3-1.)</p> <p>(NOTE: This section applies to the following storage tanks containing hazardous substances or mixtures of hazardous substances:</p> <ul style="list-style-type: none"> <li>- aboveground storage tanks with a total capacity of 185 gal or greater</li> <li>- underground storage tanks of any capacity</li> <li>- non-stationary tanks used to store 1000 kg (2200 pounds) or more</li> <li>- any of the above storage tanks that have not been permanently closed.)</li> </ul> <p>(NOTE: These requirements do not apply to:</p> <ul style="list-style-type: none"> <li>- process tanks</li> <li>- assembly line tanks and accessory equipment the volume of which is more than 90 percent above the surface of the ground</li> <li>- storage tanks that are regulated under other articles and related to liquid natural and petroleum gas, petroleum bulk storage, solid wastes, resource recovery facilities, industrial hazardous wastes, and atomic energy</li> <li>- nonstationary tanks, barrels, drums, or other holding vessels unless used to store 2200 lb or more for 90 or more consecutive days</li> <li>- septic tanks</li> <li>- stormwater or wastewater collection systems</li> <li>- any aboveground hazardous substance tanks used for agricultural purposes on a farm</li> <li>- capacitors or transformers.</li> </ul> |

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| <p><b>HM.20.</b></p> <p><b>RELEASES OF<br/>HAZARDOUS<br/>MATERIALS</b></p> <p><b>HM.20.1.NY.</b> Releases of reportable quantities of hazardous materials are prohibited (6 NYCRR Section 595.2) [Revised January 1999; Revised March 2005].</p> <p><b>HM.20.2.NY.</b> Release reporting standards must be met for stored hazardous substances (6 NYCRR Sections 595.3(a) and (b) and 597.2(c)) [Revised March 2010].</p> | <p>Verify that all unpermitted releases of reportable quantities of hazardous materials (see Appendix 3-1 for a list of reportable quantities; see also Appendix 3-1 of the TEAM Guide), have been reported.</p> <p>(NOTE: Appendix D of the New York SARA Title III and the Chemical Emergency Preparedness Programs State Implementation Memorandum states the following: Oil releases in excess of 1000 gallons which have reached surface water or have the potential for reaching surface waters must be reported.)</p> <p>(NOTE: See Appendix 3-1 for list of reportable quantities of hazardous substances.)</p> <p>Verify that installations that store hazardous substances report by phone to the Department's hotline (800/457-7362) within 2 h any release of reportable quantities of hazardous substances unless the following exemptions apply:</p> <ul style="list-style-type: none"> <li>- the spill or overfill is to a secondary containment system that prevents substance from reaching the waters of the state</li> <li>- the spill or overfill is controlled and completely contained within 24 hours</li> <li>- the total volume of the spill or overfill is recovered or accounted for within 24 hours.</li> </ul> <p>Verify that, if the secondary containment system does not prevent a reportable quantity of the hazardous substance from reaching the environment, the spill or overfill is reported at the time the substance reaches the environment, but in no event later than 24 hours from the time of the spill or overfill.</p> <p>Verify that releases of amounts of hazardous substances below the reportable quantity are also reported within 2 h if:</p> <ul style="list-style-type: none"> <li>- the release results, or may reasonably be expected to result, in a fire with potential offsite impacts</li> <li>- the release causes, or may reasonably be expected to cause, an explosion</li> <li>- the release causes, or may reasonably be expected to cause, a contravention of air quality standards</li> <li>- the release results, or may reasonably be expected to result, in vapors, dust, and/ or gases that may cause illness or injury to persons, not including persons in a building where a release originates</li> <li>- runoff from fire control or dilution waters may cause or contribute to a contravention of water quality standards.</li> </ul> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>HM.20.3.NY.</b> Facilities must take specific steps upon discovery of a release of hazardous substances from a storage tank (6 NYCRR Sections 596.1(b) and 596.6(a)) [Revised March 2010].</p> | <p>(NOTE: Spills or overfills to a secondary containment system that result in any of the conditions listed above must also be reported within 2 hours.)</p> <p>(NOTE: Notification of a release of reportable quantities of antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium or zinc is not required if the solid particles are larger than 100 micrometers (0.004 inches.)</p> <p>Verify that the Department is notified of a suspected or probable release within 24 h of discovery of any of the following conditions, unless an investigation shows a release has not occurred or does not need to be reported:</p> <ul style="list-style-type: none"> <li>- test, sampling, or monitoring results from a release detection method indicating a release have occurred</li> <li>- unusual operating conditions such as erratic behavior of product dispensing equipment, sudden loss of product from a storage tank, an unexpected presence of water in a tank, or the physical presence of a hazardous substance or an unusual level of vapors on a site that are of unknown origin</li> <li>- impacts in the surrounding area, such as evidence of hazardous substance or resulting vapors in soils, basements, sewer and utility lines, and nearby surface waters</li> <li>- any other conditions or indications of a suspected release.</li> </ul> <p>(NOTE: If within 24 h of the discovery of a suspected release it is confirmed no release has occurred, a release does not have to be reported.)</p> <p>(NOTE: This section applies to releases from the following storage tanks containing hazardous substances:</p> <ul style="list-style-type: none"> <li>- aboveground stationary storage tanks with a total capacity of 185 gal or greater</li> <li>- underground storage tanks of any capacity</li> <li>- non-stationary tanks used to store 1000 kg (2200 lb) or more for 90 or more consecutive days</li> <li>- all storage tanks that meet the above conditions and that have not been permanently closed.)</li> </ul> <p>Verify that immediate action is taken to protect human health, safety, and the environment, including, but not limited to, the following:</p> <ul style="list-style-type: none"> <li>- signaling alarms</li> <li>- mitigation of fire and safety hazards</li> <li>- contacting emergency response officials</li> <li>- evacuation of personnel from the site</li> <li>- isolation of the impact zone</li> <li>- preventing the migration of the release and stopping</li> <li>- plugging, or containing the release.</li> </ul> |

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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>HM.20.4.NY.</b> Facilities must take specific release or spill investigation and confirmation steps following a release from a storage tank (6 NYCRR Section 596.6(b)).</p> | <p>Verify that operation of the tank is discontinued while a release is occurring.</p> <p>Verify that, if the release cannot be expeditiously and permanently stopped or further releases cannot be prevented while repairs are being made, the tank is emptied and the contents promptly removed to a secure tank.</p> <p>(NOTE: These requirements do not apply to:</p> <ul style="list-style-type: none"> <li>- process tanks</li> <li>- assembly line tanks and accessory equipment the volume of which is more than ninety (90) percent above the surface of the ground</li> <li>- a nonstationary tank, barrel, drum or other holding vessel unless used to store 2200 lb or more for 90 or more consecutive days</li> <li>- septic tanks, stormwater or wastewater collection system</li> <li>- capacitors or transformers</li> <li>- any aboveground storage tank on an operating farm used solely to store or contain a hazardous substance which will be used for agricultural purposes on such farm;</li> <li>- storage tanks related to liquid petroleum pipeline corporations (Public Service Law, Article 3-C);</li> <li>- storage tanks regulated under: <ul style="list-style-type: none"> <li>- the Liquefied Natural and Petroleum Gas Act</li> <li>- Article 27, Title 7 of the ECL (Solid Waste Management and Resource Recovery Facilities)</li> <li>- Article 27, Title 9 of the ECL (Industrial Hazardous Waste Management)</li> <li>- Article 27, Title 11 of the ECL (Industrial Siting Hazardous Waste Facilities)</li> <li>- the Natural Gas Pipeline Safety Act of 1968 as set forth in ECL section 40-0103.2</li> <li>- the Hazardous Liquid Pipeline Safety Act of 1979 as set forth in ECL section 40-0103.3</li> <li>- the Natural Gas Act as set forth in ECL section 40-0103.4</li> <li>- the Atomic Energy Act of 1954 as set forth in ECL section 40-0103.7</li> <li>- Article 12 of the Navigation Law or ECL Article 17, Title 10 (Petroleum Bulk Storage Act).)</li> </ul> </li> </ul> <p>(NOTE: See HM.20.3.NY. for applicability and exemptions.)</p> <p>Verify that all actual, probable, or suspected releases or spills requiring reporting (see Appendix 3-1 of this manual and the TEAM Guide Appendix 3-1 for reportable quantities) are immediately investigated to determine the following:</p> <ul style="list-style-type: none"> <li>- quantity of release or spill</li> <li>- extent of contamination</li> <li>- threat to public health, safety, and the environment.</li> </ul> <p>Verify that the investigation is performed at a sufficient level of detail to determine immediate and long-term steps needed for corrective action and</p> |



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| (6 NYCRR Section 598.1(k)).         | <p>Verify that the report is properly indexed, logically organized, and filed on the premises of the facility at all times.</p> <p>Verify that the report is updated at least annually or whenever a significant release occurs or a substantial modification is made.</p> <p>(NOTE: The comprehensiveness of the report is a function of the risks at the facility.)</p> <p>Verify that the report includes the following information:</p> <ul style="list-style-type: none"> <li>- copy of the registration application and certificate</li> <li>- management approval of the report evidenced by the signature of the authorized representative</li> <li>- up-to-date facility site map of sufficient detail to locate and identify tanks, transfer stations, and connecting pipes</li> <li>- name, signature, and license number of the Professional Engineer licensed in New York State or other qualified person who prepared the plan</li> <li>- listing and summary description, for the past 5 yr, of releases either: <ul style="list-style-type: none"> <li>- required to be reported under state or Federal law</li> <li>- which the facility can ascertain have occurred through an examination of existing books, records, or other documentation</li> </ul> </li> <li>- identification and assessment of causes of spills, leaks, and releases at the facility</li> <li>- status report on compliance with registration and new or modified facility requirements</li> <li>- appendage of those records which are kept and made available to the Department</li> <li>- a plan for spill response, including: <ul style="list-style-type: none"> <li>- a prediction of the direction of flow or dispersion of a spill</li> <li>- a map showing areas impacted by a spill including sewers, drainage ditches, water supplies, wells, streams, and populated areas</li> <li>- list of equipment and materials to contain a spill</li> <li>- name and phone number for emergency contacts, coordinators, and clean-up contractors</li> <li>- spill reporting procedures</li> <li>- plans for annual drills and other information consistent with generally accepted spill prevention control and countermeasure practices.</li> </ul> </li> </ul> |

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| <b>HM.50.</b><br><br><b>HAZARDOUS MATERIALS TRANSPORTATION</b><br><br><b>HM.50.1.NY.</b> [Deleted<br>March 2005]. | <br><br><br><br><br><br><br><br><br><br>(NOTE: Part 507, Transportation of Hazardous Materials, repealed.) |



### Appendix 3-1

#### Hazardous Substance List

(Source: 6 NYCRR 597.2)

[Revised March 2007]

6 NYCRR 371 for the identification and listing of hazardous wastes included in the definition of hazardous substances.

Except for petroleum, this table is a list of all other hazardous substances in alphabetical order. Substances noted with an “A” are acutely hazardous substances.

Notification of the release of an RQ (Reportable Quantity) of solid particles of antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel selenium, silver, thallium, or zinc is not required if the mean diameter of the particles released is larger than 100 micrometers (0.004 in.).

| CAS #     | Substance  | Reportable Quantity |       |   |
|-----------|--|---------------------|-------|---|
|           |  | Air                 | Water |   |
| 83-32-9   | Acenaphthene   | 1                   | 1     | A |
| 208-96-8  | Acenaphthylene                                       | 1                   | 1     |   |
| 75-07-0   | Acetaldehyde   | 1000                | 1     |   |
| 75-87-6   | Acetaldehyde, trichloro-                             | 5000                | 1     |   |
| 60-35-5   | Acetamide  | 1                   | 1     |   |
| 93-71-0   | Acetamide, 2-chloro-n,n-diallyl-                     | 1                   | 1     |   |
| 640-19-7  | Acetamide, 2-fluoro-                                 | 100                 | 1     |   |
| 591-08-2  | Acetamide, n-(aminothioxomethyl)                     | 1000                | 1     |   |
| 62-44-2   | Acetamide,n-(4-ethoxyphenyl)                         | 100                 | 1     |   |
| 53-96-3   | Acetamide, n-9h-fluoren-2-yl-                        | 1                   | 1     |   |
| 62-55-5   | Acetamide, thio-                                     | 10                  | 1     | A |
| 64-19-7   | Acetic acid  | 5000                | 100   |   |
| 93-79-8   | Acetic acid, (2,4,5-trichlorophenoxy)-, butyl ester  | 1000                | 100   |   |
| 94-11-1   | Acetic acid, (2,4-dichlorophenoxy)-, isopropyl ester | 100                 | 100   |   |
| 108-24-7  | Acetic anhydride                                     | 5000                | 100   |   |
| 67-64-1   | Acetone  | 5000                | 1     |   |
| 75-86-5   | Acetone cyanohydrin                                  | 10                  | 1     |   |
| 1752-30-3 | Acetone, thiosemicarbazide                           | 1                   | 1     |   |
| 75-05-8   | Acetonitrile   | 5000                | 1     |   |
| 62-44-2   | p-Acetophenetidine                                   | 100                 | 1     |   |
| 98-86-2   | Acetophenone   | 5000                | 1     | A |
| 506-96-7  | Acetyl bromide                                       | 5000                | 1     |   |
| 75-36-5   | Acetyl chloride                                      | 5000                | 1     |   |
| 359-06-8  | Acetyl chloride, fluoro-                             | 1                   | 1     |   |
| 591-08-2  | 1-Acetyl-2-thiourea                                  | 1000                | 1     |   |
| 53-96-3   | 2-Acetylaminofluorene                                | 1                   | 1     |   |
| 107-02-8  | Acrolein   | 1                   | 1     |   |
| 79-06-1   | Acrylamide   | 5000                | 100   |   |
| 79-10-7   | Acrylic acid   | 5000                | 10    |   |
| 80-63-7   | Acrylic acid, 2-chloro-, methyl ester                | 1                   | 1     |   |
| 140-88-5  | Acrylic acid, ethyl ester                            | 1000                | 1     | A |
| 107-13-1  | Acrylonitrile  | 100                 | 1     |   |
| 814-68-6  | Acryloyl chloride                                    | 1                   | 1     |   |
| 50-76-0   | Actinomycin D  | 1                   | 1     |   |
| 124-04-9  | Adipic acid  | 5000                | 100   |   |

| CAS #      | Substance                                       | Reportable Quantity |       |   |
|------------|---|---------------------|-------|---|
|            |   | Air                 | Water |   |
| 111-69-3   | Adiponitrile                                    | 1                   | 1     | A |
| 23214-92-8 | Adriamycin                                      | 1                   | 1     |   |
| 148-82-3   | Alanine,3-[p-bis(2-chloroethyl) amino]phenyl-,1 | 1                   | 1     |   |
| 116-06-3   | Aldicarb  | 1                   | 1     | A |
| 309-00-2   | Aldrin  | 1                   | 1     |   |
| 93-71-0    | Allidochlor                                     | 1                   | 1     |   |
| 107-18-6   | Allyl alcohol                                   | 100                 | 100   | A |
| 107-05-1   | Allyl chloride                                  | 1000                | 1     |   |
| 107-11-9   | Allylamine                                      | 1                   | 1     |   |
| 20859-73-8 | Aluminum phosphide                              | 100                 | 100   | A |
| 10043-01-3 | Aluminum sulfate                                | 5000                | 100   |   |
| 92-67-1    | 4-Aminobiphenyl                                 | 1                   | 1     |   |
| 54-62-6    | Aminopterin                                     | 1                   | 1     | A |
| 78-53-5    | Amiton  | 1                   | 1     |   |
| 3734-97-2  | Amiton oxalate                                  | 1                   | 1     |   |
| 61-82-5    | Amitrole  | 10                  | 1     | A |
| 7664-41-7  | Ammonia   | 100                 | 100   |   |
| 631-61-8   | Ammonium acetate                                | 5000                | 100   |   |
| 1863-63-4  | Ammonium benzoate                               | 5000                | 100   | A |
| 1066-33-7  | Ammonium bicarbonate                            | 5000                | 100   |   |
| 7789-09-5  | Ammonium bichromate                             | 10                  | 10    |   |
| 1341-49-7  | Ammonium bifluoride                             | 5000                | 100   | A |
| 10192-30-0 | Ammonium bisulfite                              | 5000                | 100   |   |
| 1111-78-0  | Ammonium carbamate                              | 5000                | 100   |   |
| 506-87-6   | Ammonium carbonate                              | 5000                | 100   | A |
| 12125-02-9 | Ammonium chloride                               | 5000                | 100   |   |
| 7788-98-9  | Ammonium chromate                               | 10                  | 10    |   |
| 3012-65-5  | Ammonium citrate, dibasic                       | 5000                | 100   | A |
| 12125-01-8 | Ammonium fluoride                               | 100                 | 100   |   |
| 13826-83-0 | Ammonium fluoroborate                           | 5000                | 100   |   |
| 1336-21-6  | Ammonium hydroxide                              | 1000                | 100   | A |
| 7803-55-6  | Ammonium metavanadate                           | 1000                | 100   |   |
| 6009-70-7  | Ammonium oxalate                                | 5000                | 100   |   |
| 5972-73-6  | Ammonium oxalate                                | 5000                | 100   | A |
| 14258-49-2 | Ammonium oxalate                                | 5000                | 100   |   |
| 131-74-8   | Ammonium picrate, wet                           | 10                  | 1     |   |
| 16919-19-0 | Ammonium silicofluoride                         | 1000                | 100   | A |
| 7773-06-0  | Ammonium sulfamate                              | 5000                | 100   |   |
| 12135-76-1 | Ammonium sulfide                                | 5000                | 100   |   |
| 10196-04-0 | Ammonium sulfite                                | 5000                | 100   | A |
| 14307-43-8 | Ammonium tartrate                               | 5000                | 100   |   |
| 3164-29-2  | Ammonium tartrate                               | 5000                | 100   |   |
| 1762-95-4  | Ammonium thiocyanate                            | 5000                | 1     | A |
| 999-81-5   | Ammonium, (2-chloroethyl) trimethyl-, chloride  | 1                   | 1     |   |
| 300-62-9   | Amphetamine                                     | 1                   | 1     |   |
| 628-63-7   | Amyl acetate                                    | 5000                | 1     | A |
| 123-92-2   | iso-Amyl acetate                                | 5000                | 1     |   |
| 626-38-0   | sec-Amyl acetate                                | 5000                | 1     |   |
| 625-16-1   | tert-Amyl acetate                               | 5000                | 100   | A |
| 62-53-3    | Aniline   | 5000                | 1     |   |
| 88-05-1    | Aniline, 2,4,6-trimethyl-                       | 1                   | 1     |   |
| 106-47-8   | Aniline, p-chloro-                              | 1000                | 1     |   |

| CAS #      | Substance   | Reportable Quantity |       |
|------------|---|---------------------|-------|
|            |   | Air                 | Water |
| 60-11-7    | Aniline,n,n-dimethyl-4-phenylazo-                 | 10                  | 1     |
| 90-04-0    | o-Anisidine                                       | 1                   | 1     |
| 120-12-7   | Anthracene  | 1                   | 1     |
| 7440-36-0  | Antimony (see footnote {1})                       | 5000                | 100   |
| 7647-18-9  | Antimony chloride                                 | 1000                | 100   |
| 7647-18-9  | Antimony pentachloride                            | 1000                | 100   |
| 7783-70-2  | Antimony pentafluoride                            | 1                   | 1     |
| 28300-74-5 | Antimony potassium tartrate                       | 100                 | 100   |
| 7789-61-9  | Antimony tribromide                               | 1000                | 100   |
| 10025-91-9 | Antimony trichloride                              | 1000                | 100   |
| 7783-56-4  | Antimony trifluoride                              | 1000                | 100   |
| 1309-64-4  | Antimony trioxide                                 | 1000                | 100   |
| 1397-94-0  | Antimycin A                                       | 1                   | 1     |
| 86-88-4    | Antu  | 100                 | 1     |
| 12674-11-2 | Aroclor 1016                                      | 1                   | 1     |
| 11104-28-2 | Aroclor 1221                                      | 1                   | 1     |
| 11141-16-5 | Aroclor 1232                                      | 1                   | 1     |
| 53469-21-9 | Aroclor 1242                                      | 1                   | 1     |
| 12672-29-6 | Aroclor 1248                                      | 1                   | 1     |
| 11097-69-1 | Aroclor 1254                                      | 1                   | 1     |
| 11096-82-5 | Aroclor 1260                                      | 1                   | 1     |
| 7440-38-2  | Arsenic (see footnote {1})                        | 1                   | 1     |
| 1327-52-2  | Arsenic acid                                      | 1                   | 1     |
| 7778-39-4  | Arsenic acid                                      | 1                   | 1     |
| 7784-34-1  | Arsenic chloride                                  | 1                   | 1     |
| 1303-32-8  | Arsenic disulfide                                 | 1                   | 1     |
| 1303-28-2  | Arsenic pentoxide                                 | 1                   | 1     |
| 7784-34-1  | Arsenic trichloride                               | 1                   | 1     |
| 1327-53-3  | Arsenic trioxide                                  | 1                   | 1     |
| 1303-33-9  | Arsenic trisulfide                                | 1                   | 1     |
| 1327-53-3  | Arsenic (III) oxide                               | 1                   | 1     |
| 1303-28-2  | Arsenic (v) oxide                                 | 1                   | 1     |
| 7784-42-1  | Arsine  | 1                   | 1     |
| 541-25-3   | Arsine, dichloro (2-chlorovinyl)-                 | 1                   | 1     |
| 1332-21-4  | Asbestos  | 1                   | 1     |
| 492-80-8   | Auramine  | 100                 | 1     |
| 115-02-6   | Azaserine   | 1                   | 1     |
| 446-86-6   | Azathioprine                                      | 1                   | 1     |
| 2642-71-9  | Azinphos-ethyl                                    | 1                   | 1     |
| 86-50-0    | Azinphos-methyl                                   | 1                   | 1     |
| 319-84-6   | alpha-BHC   | 10                  | 1     |
| 319-85-7   | beta-BHC  | 1                   | 1     |
| 319-86-8   | delta-BHC   | 1                   | 1     |
| 542-62-1   | Barium cyanide                                    | 10                  | 10    |
| 56-55-3    | Benz(a)anthracene                                 | 10                  | 1     |
| 225-51-4   | Benz(c)acridine                                   | 100                 | 1     |
| 98-87-3    | Benzal chloride                                   | 5000                | 1     |
| 98-16-8    | Benzenamine, 3-(trifluoromethyl)                  | 1                   | 1     |
| 636-21-5   | Benzenamine, 2-methyl-,<br>hydrochloride          | 100                 | 1     |
| 106-47-8   | Benzenamine, 4-chloro-                            | 1000                | 1     |
| 3165-93-3  | Benzenamine, 4-chloro-2-methyl-,<br>hydrochloride | 100                 | 1     |
| 71-43-2    | Benzene   | 10                  | 1     |

| CAS #      | Substance  | Reportable Quantity |       |   |
|------------|--|---------------------|-------|---|
|            |  | Air                 | Water |   |
| 108-90-7   | Benzene chloro-  | 100                 | 1     |   |
| 100-44-7   | Benzene chloromethyl-  | 100                 | 1     | A |
| 541-73-1   | Benzene, 1,3-dichloro-   | 100                 | 1     |   |
| 100-14-1   | Benzene, 1-(chloromethyl)-4-nitro-   | 1                   | 1     |   |
| 91-08-7    | Benzene, 2,6-diisocyanato-1-methyl-  | 100                 | 1     |   |
| 101-55-3   | Benzene, 1-bromo-4-phenoxy-  | 100                 | 100   |   |
| 606-20-2   | Benzene, 1-methyl-2,6-dinitro-   | 100                 | 1     |   |
| 98-82-8    | Benzene, 1-methylethyl-  | 5000                | 1     |   |
| 110-82-7   | Benzene, hexahydro-  | 1000                | 1     |   |
| 98-07-7    | Benzene, trichloromethyl-  | 10                  | 1     |   |
| 98-05-5    | Benzenearsonic acid  | 1                   | 1     |   |
| 84-74-2    | 1,2-Benzenedicarboxylic acid, dibutyl ester  | 10                  | 1     |   |
| 98-09-9    | Benzenesulfonyl chloride   | 100                 | 1     | A |
| 92-87-5    | Benzidine  | 1                   | 1     |   |
| 3878-19-1  | Benzimidazole, 2-(2-furyl)-  | 1                   | 1     |   |
| 3615-21-2  | Benzimidazole,4,5-dichloro-2-(trifluoromethyl)   | 1                   | 1     |   |
| 81-07-2    | 1,2-Benzisothiazolin-3-one,1,1-dioxide, and salts  | 100                 | 100   |   |
| 50-32-8    | Benzo(a)pyrene   | 1                   | 1     |   |
| 205-99-2   | Benzo(b)fluoranthene   | 1                   | 1     |   |
| 207-08-9   | Benzo(k)fluoranthene   | 5000                | 1     |   |
| 191-24-2   | Benzo(ghi)perylene   | 1                   | 1     |   |
| 189-55-9   | Benzo(rst)petaphene  | 10                  | 1     |   |
| 65-85-0    | Benzoic acid   | 5000                | 100   |   |
| 100-47-0   | Benzonitrile   | 5000                | 1     |   |
| 106-51-4   | p-Benzoquinone   | 1                   | 1     |   |
| 514-73-8   | Benzothiazolium, 3-ethyl-2-(5-(3-ethyl-2-benzothiazolinylidene)-1,3-pentadienyl)-,iodide | 1                   | 1     |   |
| 98-07-7    | Benzotrichloride   | 10                  | 1     |   |
| 98-88-4    | Benzoyl chloride   | 1000                | 1     |   |
| 218-01-9   | 1,2-Benzphenanthrene   | 100                 | 1     |   |
| 100-44-7   | Benzyl chloride  | 100                 | 1     | A |
| 140-29-4   | Benzyl cyanide   | 1                   | 1     | A |
| 98-87-3    | Benzylidene chloride   | 5000                | 1     |   |
| 7440-41-7  | Beryllium (see footnote {1})   | 10                  | 10    |   |
| 7787-47-5  | Beryllium chloride   | 1                   | 1     |   |
| 7787-49-7  | Beryllium fluoride   | 1                   | 1     |   |
| 7787-55-5  | Beryllium nitrate  | 1                   | 1     |   |
| 13597-99-4 | Beryllium nitrate  | 1                   | 1     |   |
| 15271-41-7 | Bicyclo[2.2.1]heptane-2-carbonitrile, 5 chloro.  | 1                   | 1     | A |
| 1464-53-5  | 2,2'-Bioxirane   | 10                  | 1     | A |
| 92-52-4    | Biphenyl   | 1                   | 1     |   |
| 4301-50-2  | 4-Biphenylacetic acid, 2-fluoroethyl ester   | 1                   | 1     | A |
| 2074-50-2  | 4,4'-Bipyridinium, 1,1'-dimethyl-, bis(methyl sulfate)                                   | 1                   | 1     |   |
| 1910-42-5  | 4,4'-Bipyridinium, 1,1'-dimethyl-, dichloride  | 1                   | 1     |   |
| 111-91-1   | Bis(2-chloroethoxy)methane   | 1000                | 1     |   |
| 66-75-1    | 5-(Bis(2-chloroethyl)amino)uracil  | 10                  | 10    | A |

| CAS #      | Substance  | Reportable Quantity |       |   |
|------------|--|---------------------|-------|---|
|            |  | Air                 | Water |   |
| 111-44-4   | Bis(2-chloroethyl)ether                            | 10                  | 1     |   |
| 505-60-2   | Bis(2-chloroethyl)sulfide                          | 1                   | 1     | A |
| 108-60-1   | Bis(2-chloroisopropyl)ether                        | 1000                | 100   |   |
| 117-81-7   | Bis(2-ethylhexyl)phtalate                          | 100                 | 1     |   |
| 51-75-2    | Bis(beta-chloroethyl)methylamine                   | 1                   | 1     |   |
| 534-07-6   | Bis(chloromethyl) ketone                           | 1                   | 1     |   |
| 542-88-1   | Bis(chloromethyl) ether                            | 10                  | 1     | A |
| 137-26-8   | Bis(dimethylthiocarbamoyl)disulfide                | 10                  | 10    |   |
| 154-93-8   | Bischloroethyl nitrosourea (BCNU)                  | 1                   | 1     |   |
| 4044-65-9  | Bitoscanate  | 1                   | 1     | A |
| 122-10-1   | Bomyl  | 1                   | 1     | A |
| 10294-34-5 | Boron trichloride                                  | 1                   | 1     |   |
| 7637-07-2  | Boron trifluoride                                  | 1                   | 1     |   |
| 353-42-4   | Boron trifluoride compound with methyl ether (1:1) | 1                   | 1     |   |
| 353-42-4   | Boron trifluoride-dimethyl ether                   | 1                   | 1     |   |
| 28772-56-7 | Bromadiolone                                       | 1                   | 1     |   |
| 7726-95-6  | Bromine  | 1                   | 1     |   |
| 506-68-3   | Bromine cyanide                                    | 1000                | 1     |   |
| 598-31-2   | Bromoacetone                                       | 1000                | 100   |   |
| 353-59-3   | Bromochlorodifluoromethane                         | 1                   | 1     |   |
| 74-97-5    | Bromochloromethane                                 | 1                   | 1     |   |
| 75-25-2    | Bromoform  | 100                 | 1     |   |
| 101-55-3   | 4-Bromophenyl phenyl ether                         | 100                 | 100   |   |
| 3861-41-4  | Bromooxynil butyrate                               | 1                   | 1     |   |
| 357-57-3   | Brucine  | 10                  | 1     | A |
| 924-16-3   | 1-Butanamine,n-butyl-n-nitroso-                    | 10                  | 1     |   |
| 305-03-3   | Butanoic acid, 4-[bis(2-chloroethyl) amino]benzene | 10                  | 1     |   |
| 71-36-3    | 1-Butanol  | 5000                | 1     |   |
| 78-93-3    | 2-Butanone   | 5000                | 1     |   |
| 1338-23-4  | 2-Butanone peroxide                                | 10                  | 1     | A |
| 123-73-9   | 2-Butenal  | 100                 | 1     |   |
| 4170-30-3  | 2-Butenal  | 100                 | 1     |   |
| 110-57-6   | 2-Butene, 1,4-dichloro-, (e)-                      | 1                   | 1     | A |
| 112-56-1   | b-Butoxy-b'-thiocyano diethyl ether                | 1                   | 1     | A |
| 123-86-4   | Butyl acetate                                      | 5000                | 100   |   |
| 110-19-0   | iso-Butyl acetate                                  | 5000                | 1     |   |
| 105-46-4   | sec-Butyl acetate                                  | 5000                | 1     |   |
| 540-88-5   | tert-Butyl acetate                                 | 5000                | 1     |   |
| 71-36-3    | Butyl alcohol                                      | 5000                | 1     |   |
| 85-68-7    | Butyl benzyl phthalate                             | 100                 | 1     |   |
| 109-73-9   | Butylamine   | 1000                | 100   |   |
| 78-81-9    | iso-Butylamine                                     | 1000                | 1     |   |
| 13952-84-6 | sec-Butylamine                                     | 1000                | 1     |   |
| 513-49-5   | sec-Butylamine                                     | 1000                | 100   |   |
| 75-64-9    | tert-Butylamine                                    | 1000                | 1     |   |
| 3037-72-7  | Butylamine, 4-(diethoxymethylsilyl)-               | 1                   | 1     | A |
| 107-92-6   | Butyric acid                                       | 5000                | 100   |   |
| 79-31-2    | iso-Butyric acid                                   | 5000                | 100   |   |
| 189-55-9   | Butyrene   | 10                  | 1     |   |
| 75-60-5    | Cacodylic acid                                     | 1                   | 1     |   |
| 7740-43-9  | Cadmium (plus compounds)                           | 1                   | 1     |   |

| CAS #      | Substance  | Reportable Quantity |       |
|------------|--|---------------------|-------|
|            |  | Air                 | Water |
| 7440-43-9  | Cadmium (see footnote {1})   | 10                  | 10    |
| 543-90-8   | Cadmium acetate  | 10                  | 10    |
| 7789-42-6  | Cadmium bromide  | 10                  | 10    |
| 10108-64-2 | Cadmium chloride   | 10                  | 10    |
| 1306-19-0  | Cadmium oxide  | 1                   | 1     |
| 2223-93-0  | Cadmium stearate   | 1                   | 1     |
| 7778-44-1  | Calcium arsenate   | 1                   | 1     |
| 52740-16-6 | Calcium arsenite   | 1                   | 1     |
| 75-20-7    | Calcium carbide  | 10                  | 10    |
| 13765-19-0 | Calcium chromate   | 100                 | 100   |
| 592-01-8   | Calcium cyanide  | 10                  | 10    |
| 156-67-7   | Calcium cyanamide  | 1                   | 1     |
| 26264-06-2 | Calcium dodecylbenzene sulfonate   | 1000                | 100   |
| 7778-54-3  | Calcium hypochlorite   | 10                  | 10    |
| 8001-35-2  | Camphene, octachloro-  | 1                   | 1     |
| 56-25-7    | Cantharidin  | 1                   | 1     |
| 105-60-2   | Caprolactam  | 1                   | 1     |
| 2939-80-2  | Captadol   | 1                   | 1     |
| 133-06-2   | Captan   | 10                  | 10    |
| 51-83-2    | Carbachol chloride   | 1                   | 1     |
| 26419-73-8 | Carbamic acid  | 1                   | 1     |
| 644-64-4   | Carbamic acid, dimethyl-,1-<br>((dimethylamino)carbonyl)-<br>5-methyl-1h-pyrazol-3-yl ester          | 1                   | 1     |
| 119-38-0   | Carbamic acid, dimethyl-,<br>1-isopropyl-3-methylpyrazol-<br>5-yl ester                              | 1                   | 1     |
| 23422-53-9 | Carbamic acid, methyl- ester with<br>n'-(m-hydroxyphenyl)-n,<br>n-dimethylformamidine, hydrochloride | 1                   | 1     |
| 17702-57-7 | Carbamic acid, methyl-,<br>4-(((dimethylamino)methylene)amino)-<br>m-tolyl ester                     | 1                   | 1     |
| 2631-37-0  | Carbamic acid, methyl-, m-cym-5-yl<br>ester  | 1                   | 1     |
| 1129-41-5  | Carbamic acid, methyl-, m-tolyl<br>ester   | 1                   | 1     |
| 26419-73-8 | Carbamic acid, methyl-, o-[[ (2,4-<br>dimethyl.  | 1                   | 1     |
| 615-53-2   | Carbamic acid,methylnitroso-,<br>ethylester  | 1                   | 1     |
| 63-25-2    | Carbaryl   | 100                 | 1     |
| 1563-66-2  | Carbofuran   | 10                  | 1     |
| 2231-57-4  | Carbohydrazide, thio-  | 1                   | 1     |
| 108-95-2   | Carbolic acid  | 1000                | 1     |
| 75-15-0    | Carbon disulfide   | 100                 | 100   |
| 353-50-4   | Carbon oxyfluoride   | 1000                | 100   |
| 56-23-5    | Carbon tetrachloride   | 10                  | 1     |
| 353-50-4   | Carbonyl fluoride  | 1000                | 100   |
| 463-58-1   | Carbonyl sulfide   | 1                   | 1     |
| 786-19-6   | Carbophenothion  | 1                   | 1     |
| 120-80-9   | Catechol   | 1                   | 1     |
| 75-87-6    | Chloral  | 5000                | 1     |
| 133-90-4   | Chloramben   | 1                   | 1     |

| CAS #      | Substance                                    | Reportable Quantity |       |
|------------|--|---------------------|-------|
|            |  | Air                 | Water |
| 305-03-3   | Chlorambucil                                 | 10                  | 1     |
| 56-75-7    | Chloramphenicol                              | 1                   | 1     |
| 118-75-2   | Chloranil                                    | 1                   | 1     |
| 57-74-9    | Chlordane                                    | 1                   | 1     |
| 6164-98-3  | Chlordimeform                                | 1                   | 1     |
| 470-90-6   | Chlorfenvinfos                               | 1                   | 1     |
| 7782-50-5  | Chlorine                                     | 10                  | 10    |
| 506-77-4   | Chlorine cyanide                             | 10                  | 10    |
| 10049-04-4 | Chlorine dioxide                             | 1                   | 1     |
| 24934-91-6 | Chlormephos                                  | 1                   | 1     |
| 999-81-5   | Chlormequat chloride                         | 1                   | 1     |
| 494-03-1   | Chlornaphazine                               | 100                 | 1     |
| 532-27-4   | 2-Chloroacetophone                           | 1                   | 1     |
| 106-89-8   | 1-Chloro-2,3-epoxypropane                    | 100                 | 1     |
| 59-50-7    | p-Chloro-m-cresol                            | 5000                | 100   |
| 3165-93-3  | 4-Chloro-o-toluidine hydrochloride           | 100                 | 1     |
| 107-20-0   | Chloroacetaldehyde                           | 1000                | 1     |
| 79-11-8    | Chloroacetic acid                            | 1                   | 1     |
| 106-47-8   | p-Chloroaniline                              | 1000                | 1     |
| 108-90-7   | Chlorobenzene                                | 100                 | 1     |
| 74-97-5    | Chlorobromomethane                           | 1                   | 1     |
| 59-50-7    | Chlorocresol                                 | 5000                | 100   |
| 124-48-1   | Chlorodibromomethane                         | 100                 | 1     |
| 353-59-3   | Chlorodifluorobromomethane                   | 1                   | 1     |
| 75-45-6    | Chlorodifluoromethane                        | 1                   | 1     |
| 53469-21-9 | Chlorodiphenyl                               | 1                   | 1     |
| 75-00-3    | Chloroethane                                 | 1                   | 1     |
| 107-07-3   | Chloroethanol                                | 1                   | 1     |
| 627-11-2   | Chloroethyl chloroformate                    | 1                   | 1     |
| 110-75-8   | 2-Chloroethyl vinyl ether                    | 1000                | 1     |
| 13010-47-4 | 1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea | 1                   | 1     |
| 67-66-3    | Chloroform                                   | 10                  |       |
| 107-30-2   | Chloromethyl methyl ether                    | 10                  | 1     |
| 91-58-7    | 2-Chloronaphthalene                          | 5000                | 100   |
| 76-15-3    | Chloropentafluoroethane                      | 1                   | 1     |
| 3691-35-8  | Chlorophacinone                              | 1                   | 1     |
| 95-57-8    | 2-Chlorophenol                               | 100                 | 1     |
| 108-43-0   | 3-Chlorophenyl                               | 1                   | 1     |
| 106-48-9   | 4-Chlorophenyl                               | 1                   | 1     |
| 7005-72-3  | 4-Chlorophenyl phenyl ether                  | 5000                | 100   |
| 76-06-2    | Chloropicrin                                 | 1                   | 1     |
| 126-99-8   | Chloroprene                                  | 1                   | 1     |
| 7790-94-5  | Chlorosulfonic acid                          | 1000                | 100   |
| 75-72-9    | Chlorotrifluoromethane                       | 1                   | 1     |
| 1982-47-4  | Chloroxuron                                  | 1                   | 1     |
| 2921-88-2  | Chlorpyrifos                                 | 1                   | 1     |
| 21923-23-9 | Chlorthiophos                                | 1                   | 1     |
| 67-97-0    | Cholcalciferol                               | 1                   | 1     |
| 1066-30-4  | Chromic acetate                              | 1000                | 100   |
| 11115-74-5 | Chromic acid                                 | 10                  | 10    |
| 7738-94-5  | Chromic acid                                 | 10                  | 10    |
| 10025-73-7 | Chromic chloride                             | 1                   | 1     |
| 10101-53-8 | Chromic sulfate                              | 1000                | 100   |

| CAS #      | Substance                         | Reportable Quantity |       |   |
|------------|-----------------------------------|---------------------|-------|---|
|            |                                   | Air                 | Water |   |
| 7440-47-3  | Chromium (see footnote {1})       | 5000                | 100   |   |
| 10025-73-7 | Chromium (III) chloride (1:3)     | 1                   | 1     |   |
| 10049-05-5 | Chromous chloride                 | 1000                | 100   |   |
| 218-01-9   | Chrysene                          | 100                 | 1     |   |
| 15663-27-1 | Cisplatin                         | 1                   | 1     |   |
| 8007-45-2  | Coal tar pitch volatiles          | 1                   | 1     |   |
| 8021-39-4  | Coal tar pitch volatiles          | 1                   | 1     |   |
| 62207-76-5 | Cobalt                            | 1                   | 1     | A |
| 10210-68-1 | Cobalt carbonyl                   | 1                   | 1     |   |
| 62207-76-5 | Cobalt, [[2,2'-(1,2-ethanediylbis |                     |       |   |
|            | (nitrilomethy                     | 1                   | 1     | A |
| 10210-68-1 | Cobalt, di-mu-                    |                     |       |   |
|            | carbonylhexacarbonyldi-, (Co-Co)  | 1                   | 1     |   |
| 14167-18-1 | Cobalt, n,n'-                     |                     |       |   |
|            | ethylenebis(salicylideneiminato)- | 1                   | 1     |   |
| 7789-43-7  | Cobaltous bromide                 | 1000                | 100   |   |
| 544-18-3   | Cobaltous formate                 | 1000                | 100   |   |
| 14017-41-5 | Cobaltous sulfamate               | 1000                | 100   |   |
| 124-87-8   | Cocculin                          | 1                   | 1     |   |
| 64-86-8    | Colchicine                        | 1                   | 1     |   |
| 7440-50-8  | Copper (see footnote {1})         | 5000                | 100   |   |
| 16102-92-4 | Copper arsenate (basic)           | 1                   | 1     |   |
| 544-92-3   | Copper cyanide                    | 10                  | 10    |   |
| 12002-03-8 | Copper, bis(acetato)              |                     |       |   |
|            | hexametaarsenitotetra-            | 1                   | 1     | A |
| 56-72-4    | Coumaphos                         | 10                  | 10    | A |
| 28772-56-7 | Coumarin, 3-(3-(4'-bromo-1,       |                     |       |   |
|            | 1'-biphenyl-4-yl)-3-hydroxy-      |                     |       |   |
|            | 1-phenylpropyl)-4-hydroxy-        | 1                   | 1     |   |
| 5836-29-3  | Coumarin, 4-hydroxy-3-(1,2,3,4-   |                     |       |   |
|            | tetrahydro-1-naphthyl)-           | 1                   | 1     | A |
| 5836-29-3  | Coumatetralyl                     | 1                   | 1     | A |
| 8001-58-9  | Creosote                          | 1                   | 1     |   |
| 95-48-7    | Cresol                            | 1000                | 1     |   |
| 1319-77-3  | Cresol(s)                         | 1000                | 1     |   |
| 108-39-4   | m-Cresol(s)                       | 1000                | 1     |   |
| 95-48-7    | o-Cresol(s)                       | 1000                | 1     |   |
| 106-44-5   | p-Cresol(s)                       | 1000                | 1     |   |
| 4418-66-0  | o-Cresol, 6,6'-thiobis            |                     |       |   |
|            | (4-chloro-                        | 1                   | 1     | A |
| 1319-77-3  | Cresylic acid                     | 1000                | 1     |   |
| 106-44-5   | p-Cresylic acid                   | 1000                | 1     |   |
| 535-89-7   | Crimidine                         | 1                   | 1     | A |
| 4170-30-3  | Crotonaldehyde                    | 100                 | 1     |   |
| 123-73-9   | Crotonaldehyde                    | 100                 | 1     |   |
| 98-82-8    | Cumene                            | 5000                | 1     |   |
| 80-15-9    | Cumene hydroperoxide, technical   |                     |       |   |
|            | pure                              | 10                  | 10    |   |
| 142-71-2   | Cupric acetate                    | 100                 | 100   |   |
| 12002-03-8 | Cupric acetoarsenite              | 1                   | 1     | A |
| 7447-39-4  | Cupric chloride                   | 10                  | 10    |   |
| 3251-23-8  | Cupric nitrate                    | 100                 | 100   |   |
| 5893-66-3  | Cupric oxalate                    | 100                 | 100   |   |
| 7758-98-7  | Cupric sulfate                    | 10                  | 10    |   |



| CAS #      | Substance   | Reportable Quantity |       |   |
|------------|---|---------------------|-------|---|
|            |   | Air                 | Water |   |
| 10380-29-7 | Cupric sulfate, ammoniated                                  | 100                 | 100   |   |
| 815-82-7   | Cupric tartrate   | 100                 | 100   |   |
| 57-12-5    | Cyanides(soluble cyanide salts),<br>not elsewhere specified | 10                  | 10    |   |
| 460-19-5   | Cyanogen  | 100                 | 100   | A |
| 506-68-3   | Cyanogen bromide  | 1000                | 1     |   |
| 506-77-4   | Cyanogen chloride   | 10                  | 10    |   |
| 506-78-5   | Cyanogen iodide   | 1                   | 1     |   |
| 2636-26-2  | Cyanophos   | 1                   | 1     | A |
| 675-14-9   | Cyanuric fluoride   | 1                   | 1     | A |
| 110-82-7   | Cyclohexane   | 1000                | 1     |   |
| 108-94-1   | Cyclohexanone   | 5000                | 1     |   |
| 66-81-9    | Cycloheximide   | 1                   | 1     | A |
| 131-89-5   | 2-Cyclohexyl-4,<br>6-dinitrophenol                          | 100                 | 100   |   |
| 108-91-8   | Cyclohexylamine   | 1                   | 1     |   |
| 77-47-4    | 1,3-Cyclopentadiene,1,2,3,4,5,<br>5-hexachloro-             | 10                  | 1     |   |
| 50-18-0    | Cyclophosphamide  | 10                  | 1     |   |
| 13121-70-5 | Cyhexatin   | 1                   | 1     |   |
| 94-75-7    | 2,4-D Acid  | 100                 | 1     |   |
| 25168-26-7 | 2,4-D-Esters  | 100                 | 100   |   |
| 94-79-1    | 2,4-D-Esters  | 100                 | 100   |   |
| 1928-38-7  | 2,4-D-Esters  | 100                 | 100   |   |
| 2971-38-2  | 2,4-D-Esters  | 100                 | 100   |   |
| 94-80-4    | 2,4-D-Esters  | 100                 | 1     |   |
| 1928-61-6  | 2,4-D-Esters  | 100                 | 100   |   |
| 94-11-1    | 2,4-D-Esters  | 100                 | 100   |   |
| 1320-18-9  | 2,4-D-Esters  | 100                 | 100   |   |
| 53467-11-1 | 2,4-D-Esters  | 100                 | 100   |   |
| 1929-73-3  | 2,4-D-Esters  | 100                 | 100   |   |
| 72-54-8    | DDD   | 1                   | 1     |   |
| 72-55-9    | DDE   | 1                   | 1     |   |
| 3547-04-4  | DDE   | 1                   | 1     |   |
| 50-29-3    | DDT   | 1                   | 1     |   |
| 4342-03-4  | Dacarbazine   | 1                   | 1     |   |
| 1596-84-5  | Daminozide  | 1                   | 1     |   |
| 20830-81-3 | Daunomycin  | 10                  | 1     |   |
| 17702-41-9 | Decaborane  | 1                   | 1     | A |
| 8065-48-3  | Demeton   | 1                   | 1     | A |
| 919-86-8   | Demeton-s-methyl  | 1                   | 1     | A |
| 334-88-3   | Diazomethane  | 1                   | 1     |   |
| 84-74-2    | Di-n-butyl phthalate  | 10                  | 1     |   |
| 117-81-7   | Di-n-octyl phthalate  | 100                 | 1     |   |
| 621-64-7   | Di-n-propylnitrosamine                                      | 10                  | 1     |   |
| 10311-84-9 | Dialifos  | 1                   | 1     | A |
| 2303-16-4  | Diallate  | 100                 | 1     |   |
| 302-01-2   | Diamine   | 1                   | 1     | A |
| 119-90-4   | o-Dianisidine   | 100                 | 1     |   |
| 333-41-5   | Diazinon  | 1                   | 1     |   |
| 53-70-3    | Dibenz[a,h]anthracene                                       | 1                   | 1     |   |
| 189-55-9   | Dibenzo[a,i]pyrene  | 10                  | 1     |   |
| 132-64-9   | Dibenzofuran  | 1                   | 1     |   |
| 19287-45-7 | Diborane  | 1                   | 1     | A |

| CAS #      | Substance  | Reportable Quantity |       |   |
|------------|--|---------------------|-------|---|
|            |  | Air                 | Water |   |
| 96-12-8    | 1,2-Dibromo-3-chloropropane                      | 1                   | 1     | A |
| 106-93-4   | Dibromoethane                                    | 1                   | 1     |   |
| 74-95-3    | Dibromomethane                                   | 1000                | 1     |   |
| 1918-00-9  | Dicamba  | 1000                | 100   |   |
| 117-80-6   | Dichlone   | 1                   | 1     |   |
| 76-14-2    | 1,2-Dichloro-1,1,2,2-tetrafluoroethane           | 1                   | 1     |   |
| 764-41-0   | 1,4-Dichloro-2-butene                            | 1                   | 1     |   |
| 1194-65-6  | Dichlorobenil                                    | 100                 | 1     |   |
| 95-50-1    | 1,2-Dichlorobenzene                              | 100                 | 1     |   |
| 541-73-1   | 1,3-Dichlorobenzene                              | 100                 | 1     |   |
| 106-46-7   | 1,4-Dichlorobenzene                              | 100                 | 1     |   |
| 95-50-1    | o-Dichlorobenzene                                | 100                 | 1     |   |
| 106-46-7   | p-Dichlorobenzene                                | 100                 | 1     |   |
| 25321-22-6 | Dichlorobenzene (mixed)                          | 100                 | 100   |   |
| 91-94-1    | 3,3'-Dichlorobenzidine                           | 1                   | 1     |   |
| 75-27-4    | Dichlorobromomethane                             | 5000                | 1     |   |
| 110-57-6   | trans-1,4-Dichlorobutene                         | 1                   | 1     | A |
| 111-44-4   | Dichlorodiethyl ether                            | 10                  | 1     |   |
| 75-71-8    | Dichlorodifluoromethane                          | 5000                | 100   |   |
| 542-88-1   | Dichlorodimethyl ether                           | 10                  | 1     | A |
| 50-29-3    | Dichlorodiphenyl trichloroethane                 | 1                   | 1     |   |
| 75-34-3    | 1,1-Dichloroethane                               | 1000                | 1     |   |
| 107-06-2   | 1,2-Dichloroethane                               | 100                 | 1     |   |
| 111-44-4   | Dichloroethyl ether                              | 10                  | 1     |   |
| 156-60-5   | Dichloroethylene                                 | 1000                | 1     |   |
| 75-35-4    | 1,1-Dichloroethylene                             | 100                 | 1     |   |
| 108-60-1   | Dichloroisopropyl ether                          | 1000                | 100   |   |
| 75-09-2    | Dichloromethane                                  | 1000                | 1     |   |
| 149-74-6   | Dichloromethylphenylsilane                       | 1                   | 1     |   |
| 120-83-2   | 2,4-Dichlorophenol                               | 100                 | 1     |   |
| 87-65-0    | 2,6-Dichlorophenol                               | 100                 | 100   |   |
| 94-75-7    | 2,4-Dichlorophenoxyacetic acid, salts and esters | 100                 | 1     |   |
| 27137-85-5 | Dichlorophenyl trichlorosilane                   | 1                   | 1     |   |
| 26638-19-7 | Dichloropropane                                  | 1000                | 1     |   |
| 78-99-9    | 1,1-Dichloropropane                              | 1000                | 1     |   |
| 78-87-5    | 1,2-Dichloropropane                              | 1000                | 1     |   |
| 142-28-9   | 1,3-Dichloropropane                              | 1000                | 1     |   |
| 8003-19-8  | Dichloropropane-dichloropropene (mixture)        | 5000                | 100   |   |
| 534-07-6   | Dichloropropanone                                | 1                   | 1     |   |
| 26952-23-8 | Dichloropropene                                  | 10                  | 10    |   |
| 542-75-6   | 1,3-Dichloropropene                              | 5000                | 1     |   |
| 75-99-0    | 2,2-Dichloropropionic acid                       | 5000                | 1     |   |
| 1320-37-2  | Dichlorotetrafluoroethane                        | 1                   | 1     |   |
| 78-88-6    | 2,3-Dichloropropene                              | 5000                | 100   |   |
| 62-73-7    | Dichlorvos                                       | 10                  | 1     | A |
| 115-32-2   | Dicofol  | 10                  | 1     |   |
| 141-66-2   | Dicrotophos                                      | 1                   | 1     | A |
| 60-57-1    | Dieldrin   | 1                   | 1     |   |
| 1464-53-5  | 1,2:3,4-Diepoxybutane                            | 10                  | 1     | A |
| 111-42-2   | Diethanolamine                                   | 1                   | 1     |   |
| 814-49-3   | Diethyl chlorophosphate                          | 1                   | 1     | A |

| CAS #      | Substance   | Reportable Quantity |       |
|------------|---|---------------------|-------|
|            |   | Air                 | Water |
| 60-29-7    | Diethyl ether                                     | 100                 | 100   |
| 84-66-2    | Diethyl phthalate                                 | 1000                | 1     |
| 64-67-5    | Diethyl sulfate                                   | 1                   | 1     |
| 109-89-7   | Diethylamine                                      | 1000                | 1     |
| 51-75-2    | Diethylamine, 2,2'-dichloro-n- methyl-            | 1                   | 1     |
| 121-69-7   | n,n-Diethylaniline                                | 1                   | 1     |
| 692-42-2   | Diethylarsine                                     | 1                   | 1     |
| 1642-54-2  | Diethylcarbamazine citrate                        | 1                   | 1     |
| 56-53-1    | Diethylstilbestrol                                | 1                   | 1     |
| 71-63-6    | Digitoxin   | 1                   | 1     |
| 2238-07-5  | Diglycidyl ether                                  | 1                   | 1     |
| 20830-75-5 | Digoxin   | 1                   | 1     |
| 94-58-6    | Dihydrosafrole                                    | 10                  | 1     |
| 115-26-4   | Dimefox   | 1                   | 1     |
| 60-51-5    | Dimethoate  | 10                  | 1     |
| 119-90-4   | 3,3'-Dimethoxybenzidine                           | 100                 | 1     |
| 79-44-7    | Dimethyl carbamoyl chloride                       | 1                   | 1     |
| 2524-03-0  | Dimethyl chlorothiophosphate                      | 1                   | 1     |
| 2524-03-0  | Dimethyl phosphorochloridothioate                 | 1                   | 1     |
| 131-11-3   | Dimethyl phthalate                                | 5000                | 1     |
| 77-78-1    | Dimethyl sulfate                                  | 100                 | 100   |
| 300-76-5   | Dimethyl-1,2-dibromo-2, 2-dichloroethyl phosphate | 10                  | 10    |
| 99-98-9    | Dimethyl-p-phenylenediamine                       | 1                   | 1     |
| 124-40-3   | Dimethylamine                                     | 1000                | 1     |
| 60-11-7    | Dimethylaminoazobenzene                           | 10                  | 1     |
| 57-97-6    | 7,12-Dimethylbenz(a)anthracene                    | 1                   | 1     |
| 119-93-7   | 3,3'-Dimethylbenzidine                            | 10                  | 1     |
| 75-78-5    | Dimethyldichlorosilane                            | 1                   | 1     |
| 68-12-2    | Dimethyl formamide                                | 1                   | 1     |
| 57-14-7    | 1,1-Dimethylhydrazine                             | 10                  | 1     |
| 57-14-7    | Dimethylhydrazine unsymmetrical                   | 10                  | 1     |
| 540-73-8   | Dimethylhydrazine, symmetrical                    | 1                   | 1     |
| 62-75-9    | Dimethylnitrosamine                               | 10                  | 1     |
| 122-09-8   | alpha, alpha-Dimethylphenethylamine               | 5000                |       |
| 105-67-9   | 2,4-Dimethylphenol                                | 100                 | 1     |
| 644-64-4   | Dimetilan   | 1                   | 1     |
| 534-52-1   | 4,6-Dinitro-o-cresol                              | 10                  | 1     |
| 25154-54-5 | Dinitrobenzene (mixed)                            | 100                 | 100   |
| 99-65-0    | m-Dinitrobenzene (mixed)                          | 100                 | 1     |
| 528-29-0   | o-Dinitrobenzene (mixed)                          | 100                 | 100   |
| 100-25-4   | p-Dinitrobenzene (mixed)                          | 100                 | 100   |
| 131-89-5   | Dinitrocyclohexylphenol                           | 100                 | 100   |
| 25550-58-7 | Dinitrophenol                                     | 10                  | 10    |
| 329-71-5   | 2,5-Dinitrophenol                                 | 10                  | 1     |
| 573-56-8   | 2,6-Dinitrophenol                                 | 10                  | 1     |
| 25321-14-6 | Dinitrotoluene                                    | 10                  | 1     |
| 121-14-2   | 2,4-Dinitrotoluene                                | 10                  | 1     |
| 606-20-2   | 2,6-Dinitrotoluene                                | 100                 | 1     |
| 610-39-9   | 3,4-Dinitrotoluene                                | 10                  | 1     |
| 4097-36-3  | Dinoseb   | 1                   | 1     |
| 1420-07-1  | Dinoterb  | 1                   | 1     |
| 117-84-0   | Diocetyl phthalate                                | 5000                | 1     |
| 123-91-1   | 1,4-Dioxane                                       | 100                 | 1     |

| CAS #      | Substance   | Reportable Quantity |       |   |
|------------|---|---------------------|-------|---|
|            |   | Air                 | Water |   |
| 78-34-2    | Dioxathion  | 1                   | 1     | A |
| 1746-01-6  | Dioxin  | 1                   | 1     | A |
| 82-66-6    | Diphacinone   | 1                   | 1     | A |
| 578-94-9   | Diphenylaminechloroarsine                             | 1                   | 1     |   |
| 142-84-7   | Dipropylamine   | 5000                | 1     |   |
| 85-00-7    | Diquat  | 1000                | 100   |   |
| 2764-72-9  | Diquat  | 1000                | 100   |   |
| 1937-37-7  | Direct Black 38 (technical grade)                     | 1                   | 1     |   |
| 2602-46-2  | Direct Blue 6 (technical grade)                       | 1                   | 1     |   |
| 16071-86-6 | Direct Brown 95 (technical grade)                     | 1                   | 1     |   |
| 298-04-4   | Disulfoton  | 1                   | 1     | A |
| 514-73-8   | Dithiazanine iodide                                   | 1                   | 1     |   |
| 950-10-7   | 1,3-Dithiolane, 2-(diethoxyphosphinylimino)-4-methyl- | 1                   | 1     | A |
| 330-54-1   | Diuron  | 100                 | 1     |   |
| 25155-30-0 | Dodecylbenzene sulfonate                              | 1000                | 100   |   |
| 27176-87-0 | Dodecylbenzenesulfonic acid                           | 1000                | 100   |   |
| 2104-64-5  | EPN   | 1                   | 1     | A |
| 316-42-7   | Emetine, dihydrochloride                              | 1                   | 1     |   |
| 959-98-8   | alpha-Endosulfan                                      | 1                   | 1     |   |
| 33213-65-9 | beta-Endosulfan                                       | 1                   | 1     |   |
| 1031-07-8  | Endosulfan sulfate                                    | 1                   | 1     |   |
| 115-29-7   | Endosulfan (all isomers)                              | 1                   | 1     | A |
| 2778-04-3  | Endothion   | 1                   | 1     | A |
| 72-20-8    | Endrin  | 1                   | 1     | A |
| 7421-93-4  | Endrin aldehyde                                       | 1                   | 1     |   |
| 106-89-8   | Epichlorohydrin                                       | 100                 | 1     |   |
| 51-43-4    | Epinephrine   | 1000                | 100   |   |
| 106-88-7   | 1,2 Epoxybutane                                       | 1                   | 1     |   |
| 50-14-6    | Ergocalciferol  | 1                   | 1     |   |
| 379-79-3   | Ergotamine tartrate                                   | 1                   | 1     |   |
| 75-07-0    | Ethanal   | 1000                | 1     |   |
| 111-91-1   | Ethane, 1,1'-[methylenebis (oxy)]bis(2-chloro-        | 1000                | 1     |   |
| 111-44-4   | Ethane, 1,1'-oxybis(2-chloro-                         | 10                  | 1     |   |
| 111-54-6   | 1,2-Ethanediylbiscarbamodithioic acid                 | 5000                | 100   |   |
| 75-05-8    | Ethanenitrile   | 5000                | 1     |   |
| 1622-32-8  | Ethanesulfonyl chloride, 2-chloro-                    | 1                   | 1     |   |
| 62-55-5    | Ethanethioamide                                       | 10                  | 1     |   |
| 10140-87-1 | Ethanol, 1,2-dichloro-, acetate                       | 1                   | 1     |   |
| 1116-54-7  | Ethanol, 2,2'-(nitrosoimino) bis-                     | 1                   | 1     |   |
| 371-62-0   | Ethanol, 2-fluoro-                                    | 1                   | 1     |   |
| 98-86-2    | Ethanone, 1-phenyl-                                   | 5000                | 1     |   |
| 75-36-5    | Ethanoyl chloride                                     | 5000                | 1     |   |
| 110-75-8   | Ethene, 2-chloroethoxy                                | 1000                | 1     |   |
| 156-60-5   | Ethene, trans- 1,2-dichloro-                          | 1000                | 1     |   |
| 60-29-7    | Ether   | 100                 | 100   |   |
| 1836-75-5  | Ether, 2,4-dichlorophenyl p-nitrophenyl               | 1                   | 1     |   |
| 563-12-2   | Ethion  | 10                  | 1     | A |
| 13194-48-4 | Ethoprophos   | 1                   | 1     | A |
| 110-80-5   | 2-Ethoxyethanol                                       | 1000                | 1     |   |
| 510-15-6   | Ethyl 4,4'-dichlorobenzilate                          | 10                  | 1     |   |
| 141-78-6   | Ethyl acetate   | 5000                | 1     |   |
| 140-88-5   | Ethyl acrylate, inhibited                             | 1000                | 1     |   |
| 51-79-6    | Ethyl carbamate                                       | 100                 | 1     |   |

| CAS #      | Substance                                 | Reportable Quantity |       |   |
|------------|---|---------------------|-------|---|
|            |   | Air                 | Water |   |
| 75-00-3    | Ethyl chloride                            | 1                   | 1     |   |
| 60-29-7    | Ethyl ether                               | 100                 | 100   |   |
| 97-63-2    | Ethyl methacrylate                        | 1000                | 1     |   |
| 62-50-0    | Ethyl methanesulfonate                    | 1                   | 1     |   |
| 542-90-5   | Ethyl thiocyanate                         | 1                   | 1     |   |
| 75-04-7    | Ethylamine                                | 1000                | 1     |   |
| 100-41-4   | Ethylbenzene                              | 1000                | 1     |   |
| 538-07-8   | Ethylbis(2-chloroethyl)amine              | 1                   | 1     | A |
| 107-07-3   | Ethylene chlorohydrin                     | 1                   | 1     | A |
| 106-93-4   | Ethylene dibromide                        | 1                   | 1     |   |
| 107-06-2   | Ethylene dichloride                       | 100                 | 1     |   |
| 371-62-0   | Ethylene fluorohydrin                     | 1                   | 1     |   |
| 107-21-1   | Ethylene glycol                           | 1                   | 1     |   |
| 75-21-8    | Ethylene oxide                            | 10                  | 10    |   |
| 127-18-4   | Ethylene, tetrachloro-                    | 100                 | 1     |   |
| 111-54-6   | Ethylenebis(dithiocarbamic acid)          | 5000                | 100   |   |
| 107-15-3   | Ethylenediamine                           | 5000                | 1     |   |
| 60-00-4    | Ethylenediamine tetraacetic acid          | 5000                | 1     |   |
| 151-56-4   | Ethyleneimine                             | 1                   | 1     |   |
| 75-34-3    | Ethylidene dichloride                     | 1000                | 1     |   |
| 115-21-9   | Ethyltrichlorosilane                      | 1                   | 1     |   |
| 22224-92-6 | Fenamiphos                                | 1                   | 1     | A |
| 122-14-5   | Fenitrothion                              | 1                   | 1     | A |
| 115-90-2   | Fensulfothion                             | 1                   | 1     | A |
| 55-38-9    | Fenthion                                  | 1                   | 1     |   |
| 1185-57-5  | Ferric ammonium citrate                   | 1000                | 100   |   |
| 2944-67-4  | Ferric ammonium oxalate                   | 1000                | 100   |   |
| 55488-87-4 | Ferric ammonium oxalate                   | 1000                | 100   |   |
| 7705-08-0  | Ferric chloride                           | 1000                | 100   |   |
| 7783-50-8  | Ferric fluoride                           | 100                 | 100   |   |
| 10421-48-4 | Ferric nitrate                            | 1000                | 100   |   |
| 10028-22-5 | Ferric sulfate                            | 1000                | 100   |   |
| 10045-89-3 | Ferrous ammonium sulfate                  | 1000                | 100   |   |
| 7758-94-3  | Ferrous chloride                          | 100                 | 100   |   |
| 7720-78-7  | Ferrous sulfate                           | 1000                | 100   |   |
| 7782-63-0  | Ferrous sulfate                           | 1000                | 100   |   |
| 4301-50-2  | Fluenetil                                 | 1                   | 1     | A |
| 206-44-0   | Fluoranthene                              | 1                   | 1     |   |
| 86-73-7    | Fluorene                                  | 1                   | 1     |   |
| 7664-39-3  | Fluoric acid                              | 100                 | 100   | A |
| 7782-41-4  | Fluorine                                  | 10                  | 10    | A |
| 640-19-7   | Fluoroacetamide                           | 100                 | 1     | A |
| 144-49-0   | Fluoroacetic acid                         | 1                   | 1     | A |
| 62-74-8    | Fluoroacetic acid, sodium salt            | 10                  | 1     | A |
| 359-06-8   | Fluoroacetyl chloride                     | 1                   | 1     |   |
| 75-69-4    | Fluorotrichloromethane                    | 5000                | 1     |   |
| 51-21-8    | Fluorouracil                              | 1                   | 1     |   |
| 944-22-9   | Fonofos                                   | 1                   | 1     | A |
| 50-00-0    | Formaldehyde                              | 100                 | 1     |   |
| 107-16-4   | Formaldehyde cyanohydrin                  | 1                   | 1     | A |
| 23422-53-9 | Formetanate                               | 1                   | 1     | A |
| 64-18-6    | Formic acid                               | 5000                | 100   |   |
| 627-11-2   | Formic acid, chloro-, 2-chloroethyl ester | 1                   | 1     |   |
| 109-61-5   | Formic acid, chloro-, propyl ester        | 1                   | 1     |   |

| CAS #      | Substance   | Reportable Quantity |       |
|------------|---|---------------------|-------|
|            |   | Air                 | Water |
| 2540-82-1  | Formothion  | 1                   | 1     |
| 17702-57-7 | Formparanate  | 1                   | 1     |
| 21548-32-3 | Fosthietan  | 1                   | 1     |
| 3878-19-1  | Fuberidazole  | 1                   | 1     |
| 110-17-8   | Fumaric acid  | 5000                | 100   |
| 110-00-9   | Furan   | 100                 | 100   |
| 98-01-1    | 2-Furancarboxaldehyde   | 5000                | 1     |
| 98-01-1    | Furfural  | 5000                | 1     |
| 13450-90-3 | Gallium trichloride   | 1                   | 1     |
| 54-62-6    | Glutamic acid, n-(p-(((2,4- diamino-6-pteridiny)methyl) amino)benzoyl)-,1-                            | 1                   | 1     |
| 66-81-9    | Glutarimide, 3-(2-(3,5-dimethyl-2-oxocyclohexyl)-2-hydroxyethyl)-                                     | 1                   | 1     |
| 765-34-4   | Glycidaldehyde  | 10                  | 1     |
| 86-50-0    | Guthion   | 1                   | 1     |
| 76-44-8    | Heptachlor  | 1                   | 1     |
| 1024-57-3  | Heptachlor epoxide  | 1                   | 1     |
| 309-00-2   | 1,2,3,4,10,10-Hexachloro- 1,4,4a, 5,8,8a-hexahydro-1,4,5,8-endo, exo-dimethanonaphthalene             | 1                   | 1     |
| 72-20-8    | 1,2,3,4,10,10-Hexachloro-6,7- epoxy-1,4,4a,5,6,7,8,8a- octahydro-endo,endo-1,4,5,8-dimethanonaphthal  | 1                   | 1     |
| 60-57-1    | 1,2,3,4,10,10-Hexachloro-6,7- epoxy-1,4,4a,5,6,7,8,8a- octahydro-endo, exo-1,4,5,8-dimethanonaphthale | 1                   | 1     |
| 118-74-1   | Hexachlorobenzene   | 10                  | 1     |
| 87-68-3    | Hexachlorobutadiene   | 1                   | 1     |
| 608-73-1   | Hexachlorocyclohexane (all isomers)   | 1                   |       |
| 77-47-4    | Hexachlorocyclopentadiene   | 10                  | 1     |
| 67-72-1    | Hexachloroethane  | 100                 | 1     |
| 465-73-6   | Hexachlorohexahydro-endo, endo-dimethanonaphthalene   | 1                   | 1     |
| 70-30-4    | Hexachlorophene   | 1                   | 1     |
| 757-58-4   | Hexaethyl tetraphosphate  | 100                 | 1     |
| 822-06-0   | Hexamethylene-1, 6-diisocyanate   | 1                   | 1     |
| 4835-11-4  | Hexamethylenediamine  | 1                   | 1     |
| 4835-11-4  | Hexamethylenediamine, n,n'-dibutyl-   | 1                   | 1     |
| 680-31-9   | Hexamethylphosphoramide   | 1                   | 1     |
| 110-54-3   | Hexane  | 1                   | 1     |
| 108-10-1   | Hexone  | 5000                | 1     |
| 302-01-2   | Hydrazine   | 1                   | 1     |
| 57-14-7    | Hydrazine, 1,1-dimethyl   | 10                  | 1     |
| 1615-80-1  | Hydrazine, 1,2-diethyl-   | 10                  | 10    |
| 540-73-8   | Hydrazine, 1,2-dimethyl   | 1                   | 1     |
| 122-66-7   | Hydrazine, 1,2-diphenyl   | 10                  | 1     |
| 122-66-7   | Hydrazobenzene  | 10                  |       |
| 7647-01-0  | Hydrochloric acid   | 5000                | 100   |
| 74-90-8    | Hydrocyanic acid  | 10                  | 10    |
| 7664-39-3  | Hydrofluoric acid   | 100                 | 100   |
| 7722-84-1  | Hydrogen peroxide   | 1                   | 1     |
| 7783-07-5  | Hydrogen selenide   | 1                   | 1     |
| 7783-06-4  | Hydrogen sulfide  | 100                 | 100   |
| 80-15-0    | Hydroperoxide, 1-methyl-1- phenylethyl  | 10                  | 10    |

| CAS #      | Substance  | Reportable Quantity |       |
|------------|--|---------------------|-------|
|            |  | Air                 | Water |
| 123-31-9   | Hydroquinone   | 1                   | 1     |
| 7783-06-4  | Hydrosulfuric acid   | 100                 | 100   |
| 75-60-5    | Hydroxydimethylarsine oxide  | 1                   | 1     |
| 96-45-7    | 2-Imidazolidinethione  | 10                  | 1     |
| 947-02-4   | Imidocarbonic acid, phosphonodithio-, cyclic ethylene p,p-diethyl ester  | 1                   | 1     |
| 21548-32-3 | Imidocarbonic acid, phosphonodithio-, cyclic methylene p,p-diethyl ester | 1                   | 1     |
| 3691-35-8  | 1,3-Indandione, 2-((p-chlorophenyl)phenylacetyl)-                        | 1                   | 1     |
| 82-66-6    | 1,3-Indandione, 2-diphenylacetyl-  | 1                   | 1     |
| 193-39-5   | Indeno (1,2,3-cd) pyrene   | 100                 | 1     |
| 506-78-5   | Iodine cyanide   | 1                   | 1     |
| 13463-40-6 | Iron carbonyl  | 1                   | 1     |
| 9004-66-4  | Iron dextran   | 1                   | 1     |
| 13463-40-6 | Iron, pentacarbonyl-   | 1                   | 1     |
| 297-78-9   | Isobenzan  | 1                   | 1     |
| 78-83-1    | Isobutanol   | 5000                | 1     |
| 78-82-0    | Isobutyronitrile   | 1                   | 1     |
| 102-36-3   | Isocyanic acid, 3,4-dichlorophenyl ester                                 | 1                   | 1     |
| 4098-71-9  | Isocyanic acid, methylene(3,5,5-trimethyl-3,1-cyclohexylene) ester       | 1                   | 1     |
| 25168-26-7 | Isooctyl ester of 2,4-dichlorophenoxyacetic acid                         | 100                 | 100   |
| 25311-71-1 | Isophenphos  | 1                   | 1     |
| 78-59-1    | Isophorone   | 5000                | 1     |
| 4098-71-9  | Isophorone diisocyanate  | 1                   | 1     |
| 78-79-5    | Isoprene   | 1000                | 1     |
| 42504-46-1 | Isopropanolamine dodecylbenzenesulfonate                                 | 1000                | 100   |
| 108-23-6   | Isopropyl chloroformate  | 1                   | 1     |
| 98-82-8    | Isopropylbenzene   | 5000                | 1     |
| 119-38-0   | Isopropylmethylpyrazolyl dimethylcarbamate                               | 1                   | 1     |
| 120-58-1   | Isosafrole   | 100                 | 1     |
| 4044-65-9  | Isothiocyanic acid, 1,4-phenylenedi-                                     | 1                   | 1     |
| 62-56-6    | Isothiurea   | 10                  | 10    |
| 2763-96-4  | 3(2h)-Isoxazolone, 5-(aminomethyl)-                                      | 1000                | 1     |
| 143-50-0   | Kepone   | 1                   | 1     |
| 78-97-7    | Lactonitrile   | 1                   | 1     |
| 303-34-4   | Lasiocarpine   | 10                  | 1     |
| 7439-92-1  | Lead (see footnote [FN1])  | 10                  | 10    |
| 301-04-2   | Lead acetate   | 10                  | 10    |
| 7784-40-9  | Lead arsenate  | 5000                | 100   |
| 7645-25-2  | Lead arsenate  | 5000                | 100   |
| 10102-48-4 | Lead arsenate  | 5000                | 100   |
| 7758-95-4  | Lead chloride  | 10                  | 10    |
| 13814-96-5 | Lead fluoborate  | 10                  | 10    |
| 7783-46-2  | Lead fluoride  | 10                  | 10    |
| 10101-63-0 | Lead iodide  | 10                  | 10    |
| 10099-74-8 | Lead nitrate   | 10                  | 10    |
| 7446-27-7  | Lead phosphate   | 10                  | 10    |
| 56189-09-4 | Lead stearate  | 10                  | 10    |

| CAS #      | Substance  | Reportable Quantity |       |   |
|------------|--|---------------------|-------|---|
|            |  | Air                 | Water |   |
| 7428-48-0  | Lead stearate                                    | 10                  | 10    |   |
| 52652-59-2 | Lead stearate                                    | 10                  | 10    |   |
| 1072-35-1  | Lead stearate                                    | 10                  | 10    |   |
| 1335-32-6  | Lead subacetate                                  | 100                 | 100   |   |
| 15739-80-7 | Lead sulfate                                     | 10                  | 10    |   |
| 7446-14-2  | Lead sulfate                                     | 10                  | 10    |   |
| 1314-87-0  | Lead sulfide                                     | 10                  | 10    |   |
| 75-74-1    | Lead tetramethyl                                 | 1                   | 1     |   |
| 592-87-0   | Lead thiocyanate                                 | 10                  | 10    |   |
| 21609-90-5 | Leptophos  | 1                   | 1     | A |
| 541-25-3   | Lewisite   | 1                   | 1     | A |
| 58-89-9    | Lindane  | 1                   | 1     | A |
| 14307-35-8 | Lithium chromate                                 | 10                  | 10    |   |
| 7580-67-8  | Lithium hydride                                  | 1                   | 1     |   |
| 632-99-5   | Magenta  | 1                   | 1     |   |
| 12057-74-8 | Magnesium phosphide                              | 1                   | 1     |   |
| 121-75-5   | Malathion  | 100                 | 1     |   |
| 110-16-7   | Maleic acid                                      | 5000                | 100   |   |
| 108-31-6   | Maleic anhydride                                 | 5000                | 100   |   |
| 123-33-1   | Maleic hydrazide                                 | 5000                | 1     |   |
| 2757-18-8  | Malonic acid, thallium salt (1:2)                | 1                   | 1     | A |
| 109-77-3   | Malonic dinitrile                                | 1000                | 1     |   |
| 109-77-3   | Malononitrile                                    | 1000                | 1     |   |
| 12108-13-3 | Manganese, tricarbonyl<br>methylcyclopentadienyl | 1                   | 1     | A |
| 51-75-2    | Mechlorethamine                                  | 1                   | 1     |   |
| 148-82-3   | Melphalan  | 1                   | 1     |   |
| 950-10-7   | Mephosfolan                                      | 1                   | 1     | A |
| 2032-65-7  | Mercaptodimethur                                 | 10                  | 10    | A |
| 1600-27-7  | Mercuric acetate                                 | 1                   | 1     |   |
| 7487-94-7  | Mercuric chloride                                | 1                   | 1     | A |
| 592-04-1   | Mercuric cyanide                                 | 1                   | 1     |   |
| 10045-94-0 | Mercuric nitrate                                 | 10                  | 10    |   |
| 21908-53-2 | Mercuric oxide                                   | 1                   | 1     | A |
| 7783-35-9  | Mercuric sulfate                                 | 10                  | 10    |   |
| 592-85-8   | Mercuric thiocyanate                             | 10                  | 1     |   |
| 7782-86-7  | Mercurous nitrate                                | 10                  | 10    |   |
| 10415-75-5 | Mercurous nitrate                                | 10                  | 10    |   |
| 7439-97-6  | Mercury  | 1                   | 1     |   |
| 628-86-4   | Mercury fulminate                                | 10                  | 10    |   |
| 502-39-6   | Mercury, (3-cyanoguanidino)methyl-               | 1                   | 1     | A |
| 151-38-2   | Mercury, (acetato)(2-methoxyethyl)-              | 1                   | 1     | A |
| 10476-95-6 | Methacrolein diacetate                           | 1                   | 1     | A |
| 760-93-0   | Methacrylic anhydride                            | 1                   | 1     |   |
| 920-46-7   | Methacryloyl chloride                            | 1                   | 1     | A |
| 30674-80-7 | Methacryloyloxyethyl isocyanate                  | 1                   | 1     | A |
| 10265-92-6 | Methamidophos                                    | 1                   | 1     | A |
| 107-30-2   | Methane, chloromethoxy-                          | 10                  | 1     |   |
| 75-71-8    | Methane, dichlorodifluoro-                       | 5000                | 100   |   |
| 56-23-5    | Methane, tetrachloro-                            | 10                  | 1     |   |
| 75-25-2    | Methane, tribromo-                               | 100                 | 1     |   |
| 67-66-3    | Methane, trichloro-                              | 10                  | 1     |   |
| 62-50-0    | Methanesulfonic acid, ethyl ester                | 1                   | 1     |   |
| 558-25-8   | Methanesulfonyl fluoride                         | 1                   | 1     |   |



| CAS #      | Substance  | Reportable Quantity |       |   |
|------------|--|---------------------|-------|---|
|            |  | Air                 | Water |   |
| 76-44-8    | 4,7-Methano-1h-indene, 1,4,5,6,7,8,8-heptachloro-3a,3,7,7a-tetrahydro-                       | 1                   | 1     | A |
| 64-18-6    | Methanoic acid   | 5000                | 100   |   |
| 57-74-9    | 4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tetrahydro-                           | 1                   | 1     |   |
| 297-78-9   | 4,7-Methanoisobenzofuran, 1,3,4,5,6,7,8,8-octachloro-1,3,3a,4,7,7a-hexahydro-                | 1                   | 1     | A |
| 67-56-1    | Methanol   | 5000                | 1     |   |
| 30674-80-7 | Metharcylic acid, 2-isocyanatoethyl ester  | 1                   | 1     | A |
| 2385-85-5  | 1,3,4-Metheno-1h-cyclobuta(cd)-pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachlorooctahydro- | 1                   | 1     |   |
| 950-37-8   | Methidathion   | 1                   | 1     | A |
| 16752-77-5 | Methomyl   | 100                 | 1     | A |
| 72-43-5    | Methoxychlor   | 1                   | 1     |   |
| 151-38-2   | Methoxyethylmercuric acetate   | 1                   | 1     | A |
| 80-63-7    | Methyl 2-chloroacrylate  | 1                   | 1     | A |
| 78-93-3    | Methyl acetone   | 5000                | 1     |   |
| 74-83-9    | Methyl bromide   | 1000                | 1     |   |
| 74-87-3    | Methyl chloride  | 100                 | 1     |   |
| 79-22-1    | Methyl chlorocarbonate   | 1000                | 1     | A |
| 71-55-6    | Methyl chloroform  | 1000                | 1     |   |
| 79-22-1    | Methyl chloroformate   | 1000                | 1     | A |
| 107-30-2   | Methyl chloromethyl ether  | 10                  | 1     | A |
| 75-05-8    | Methyl cyanide   | 5000                | 1     |   |
| 78-93-3    | Methyl ethyl ketone  | 5000                | 1     |   |
| 1338-23-4  | Methyl ethyl ketone peroxide   | 10                  | 1     | A |
| 60-34-4    | Methyl hydrazine   | 10                  | 1     | A |
| 74-88-4    | Methyl iodide  | 100                 | 1     |   |
| 108-10-1   | Methyl isobutyl ketone   | 5000                | 1     |   |
| 624-83-9   | Methyl isocyanate  | 10                  | 1     | A |
| 556-61-6   | Methyl isothiocyanate  | 1                   | 1     | A |
| 74-93-1    | Methyl mercaptan   | 100                 | 100   |   |
| 80-62-6    | Methyl methacrylate  | 1000                | 1     |   |
| 298-00-0   | Methyl parathion   | 100                 | 1     | A |
| 3735-23-7  | Methyl phenkapton  | 1                   | 1     |   |
| 676-97-1   | Methyl phosphonic dichloride   | 1                   | 1     | A |
| 77-78-1    | Methyl sulfate   | 100                 | 100   |   |
| 75-18-3    | Methyl sulfide   | 1                   | 1     |   |
| 556-64-9   | Methyl thiocyanate   | 1                   | 1     |   |
| 75-79-6    | Methyl trichlorosilane   | 1                   | 1     |   |
| 78-94-4    | Methyl vinyl ketone  | 1                   | 1     | A |
| 70-25-7    | n-Methyl-n'-nitro-n-nitrosoguanidine   | 10                  | 1     |   |
| 126-98-7   | Methylacrylonitrile  | 1                   | 1     | A |
| 119-93-7   | Methylaniline  | 10                  | 1     |   |
| 56-49-5    | 3-Methylchloranthrene  | 10                  | 1     |   |
| 12108-13-3 | Methylcyclopentadienyl manganese tricarbonyl   | 1                   | 1     | A |
| 74-95-3    | Methylene bromide  | 1000                | 1     |   |
| 75-09-2    | Methylene chloride   | 1000                | 1     |   |
| 101-14-4   | 4,4'-Methylenebis  |                     |       |   |

| CAS #      | Substance                       | Reportable Quantity |       |   |
|------------|---------------------------------|---------------------|-------|---|
|            |                                 | Air                 | Water |   |
| 70-30-4    | (2-chloroaniline)               | 10                  | 10    |   |
|            | 2,2'-Methylenebis               |                     |       |   |
|            | (3,4,6-trichlorophenol)         | 1                   | 1     |   |
| 101-77-9   | 4,4'-Methylenedianiline         | 1                   | 1     |   |
| 101-68-8   | Methalene diphenyl diisocyanate | 1                   | 1     |   |
| 502-39-6   | Methylmercuric dicyanamide      | 1                   | 1     | A |
| 149-74-6   | Methylphenyldichlorosilane      | 1                   | 1     |   |
| 1634-04-4  | Methyl tert-butyl ether         | 1                   | 1     |   |
| 1129-41-5  | Metolcarb                       | 1                   | 1     |   |
| 443-48-1   | Metronidazole                   | 1                   | 1     |   |
| 7786-34-7  | Mevinphos                       | 10                  | 1     | A |
| 315-18-4   | Mexacarbate                     | 1000                | 1     | A |
| 2385-85-5  | Mirex                           | 1                   | 1     |   |
| 50-07-7    | Mitomycin C                     | 10                  | 1     | A |
| 75-01-4    | Monochloroethylene              | 1                   | 1     |   |
| 75-72-9    | Monochlorotrifluoromethane      | 1                   | 1     |   |
| 6923-22-4  | Monocrotophos                   | 1                   | 1     | A |
| 75-04-7    | Monoethylamine                  | 1000                | 1     |   |
| 60-34-4    | Monomethyl hydrazine            | 10                  | 1     | A |
| 74-89-5    | Monomethylamine                 | 100                 | 1     |   |
| 505-60-2   | Mustard gas                     | 1                   | 1     | A |
| 300-76-5   | Naled                           | 10                  | 10    |   |
| 91-20-3    | Naphthalene                     | 100                 | 1     |   |
| 91-58-7    | Naphthalene, 2-chloro-          | 5000                | 100   |   |
| 130-15-4   | 1,4-Naphthalenedione            | 5000                | 100   |   |
| 1338-24-5  | Naphthenic acid                 | 100                 | 100   |   |
| 134-32-7   | 1-Naphthylamine                 | 100                 | 1     |   |
| 91-59-8    | 2-Naphthylamine                 | 10                  | 1     |   |
| 134-32-7   | alpha-Naphthylamine             | 100                 | 1     |   |
| 91-59-8    | beta-Naphthylamine              | 10                  | 1     |   |
| 494-03-1   | 2-Naphthylamine, n,n-bis        |                     |       |   |
|            | (2-chloroethyl)-                | 100                 | 1     |   |
| 86-88-4    | Naphthylthiourea                | 100                 | 1     | A |
| 130-15-4   | 1,4-Napthoquinone               | 5000                | 100   |   |
| 7440-02-0  | Nickel (see footnote [FN1])     | 100                 | 100   |   |
| 15699-18-0 | Nickel ammonium sulfate         | 100                 | 100   |   |
| 13463-39-3 | Nickel carbonyl                 | 10                  | 10    | A |
| 37211-05-5 | Nickel chloride                 | 10                  | 100   |   |
| 7718-54-9  | Nickel chloride                 | 10                  | 10    |   |
| 557-19-7   | Nickel cyanide                  | 10                  | 1     |   |
| 12054-48-7 | Nickel hydroxide                | 10                  | 10    |   |
| 14216-75-2 | Nickel nitrate                  | 100                 | 100   |   |
| 7786-81-4  | Nickel sulfate                  | 100                 | 100   |   |
| 54-11-5    | Nicotine and salts              | 100                 | 1     | A |
| 65-30-5    | Nicotine sulfate                | 1                   | 1     |   |
| 7697-37-2  | Nitric acid                     | 1000                | 100   |   |
| 10102-43-9 | Nitric oxide                    | 10                  | 10    |   |
| 99-55-8    | 5-Nitro-o-toluidine             | 100                 | 1     |   |
| 100-01-6   | p-Nitroaniline                  | 5000                | 1     |   |
| 98-95-3    | Nitrobenzene                    | 1000                | 1     |   |
| 92-93-3    | 4-Nitrobiphenyl                 | 1                   | 1     |   |
| 1122-60-7  | Nitrocyclohexane                | 1                   | 1     | A |
| 1836-75-5  | Nitrofen                        | 1                   | 1     |   |
| 10544-72-6 | Nitrogen dioxide                | 10                  | 10    |   |

| CAS #      | Substance  | Reportable Quantity |       |   |
|------------|--|---------------------|-------|---|
|            |  | Air                 | Water |   |
| 10102-44-0 | Nitrogen dioxide   | 10                  | 10    | A |
| 10544-72-6 | Nitrogen tetroxide   | 10                  | 10    |   |
| 55-63-0    | Nitroglycerin  | 10                  | 10    |   |
| 88-75-5    | 2-Nitrophenol  | 100                 | 1     |   |
| 100-02-7   | 4-Nitrophenol  | 100                 | 1     |   |
| 25154-55-6 | Nitrophenol (mixed)  | 100                 | 100   |   |
| 554-84-7   | m-Nitrophenol (mixed)  | 100                 | 1     |   |
| 88-75-5    | o-Nitrophenol (mixed)  | 100                 | 1     |   |
| 79-46-9    | 2-Nitropropane   | 10                  | 1     |   |
| 59-89-2    | n-nitrosomorpholine  | 1                   | 1     |   |
| 759-73-9   | n-Nitroso-n-ethylurea  | 1                   | 1     |   |
| 684-93-5   | n-Nitroso-n-methylurea   | 1                   | 1     |   |
| 615-53-2   | n-Nitroso-n-methylurethane   | 1                   | 1     |   |
| 924-16-3   | n-Nitrosodi-n-butylamine   | 10                  | 1     |   |
| 621-64-7   | n-Nitrosodi-n-propylamine  | 10                  | 1     |   |
| 1116-54-7  | n-Nitrosodiethanolamine  | 1                   | 1     |   |
| 55-18-5    | n-Nitrosodiethylamine  | 1                   | 1     |   |
| 62-75-9    | n-Nitrosodimethylamine   | 10                  | 1     | A |
| 86-30-6    | n-Nitrosodiphenylamine   | 100                 | 100   |   |
| 4549-40-0  | n-Nitrosomethylvinylamine  | 10                  | 1     | A |
| 100-75-4   | n-Nitrosopiperidine  | 10                  | 10    |   |
| 930-55-2   | n-Nitrosopyrrolidine   | 1                   | 1     |   |
| 99-08-1    | Nitrotoluene   | 1000                | 100   |   |
| 1321-12-6  | Nitrotoluene   | 1000                | 100   |   |
| 99-08-1    | m-Nitrotoluene   | 1000                | 100   |   |
| 88-72-2    | o-Nitrotoluene   | 1000                | 100   |   |
| 99-99-0    | p-Nitrotoluene   | 1000                | 1     |   |
| 991-42-4   | Norbormide   | 1                   | 1     | A |
| 15271-41-7 | 2-Norbornanone, endo-3-chloro-exo-6-cyano-,o-(methylcarbamoyl) oxime                                 | 1                   | 1     | A |
| 991-42-4   | 5-Norbornene-2,3-dicarboximide, 5-(alpha-hydroxy-alpha-2-pyridylbenzyl)-7-(alpha-2-pyridylbenzyliden | 1                   | 1     | A |
| 115-29-7   | 5-Norbornene-2,3-dimethanol, 1,4,5,6,7,7-hexachloro, cyclic sulfite                                  | 1                   | 1     |   |
| 2223-93-0  | Octadecanoic acid, cadmium salt  | 1                   | 1     | A |
| 152-16-9   | Octamethylpyrophosphoramide  | 100                 | 100   | A |
| 0          | Organorhodium complex (PMN82147)   | 1                   | 1     |   |
| 20816-12-0 | Osmium tetroxide   | 1000                | 100   | A |
| 56-25-7    | 7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic anhydride, 2,3-dimethyl-                                 | 1                   | 1     |   |
| 145-73-3   | 7-Oxabicyclo[2.2.1]heptane,2,3-dicarboxylic acid   | 1000                | 100   | A |
| 23135-22-0 | Oxamimidic acid, n',n'-dimethyl-n-((methylcarbamoyl)oxy)-1-methylthio-                               | 1                   | 1     | A |
| 23135-22-0 | Oxamyl   | 1                   | 1     | A |
| 50-18-0    | 2h-1,3,2-Oxazaphosphorine, 2-[bis (2-chloroethyl)amin] tetrahydro-2-oxide                            | 10                  | 1     |   |

| CAS #      | Substance                                   | Reportable Quantity |       |
|------------|---|---------------------|-------|
|            |   | Air                 | Water |
| 78-71-7    | Oxetane, 3,3-bis(chloromethyl)-             | 1                   | 1     |
| 75-21-8    | Oxirane                                     | 10                  | 10    |
| 106-89-8   | Oxirane, 2-(chloromethyl)-                  | 100                 | 1     |
| 2497-07-6  | Oxydisulfoton                               | 1                   | 1     |
| 434-07-1   | Oxymetholone                                | 1                   | 1     |
| 10028-15-6 | Ozone                                       | 1                   | 1     |
| 12674-11-2 | PCB- Aroclor 1016                           | 1                   | 1     |
| 53469-21-9 | PCB- Aroclor 1242                           | 1                   | 1     |
| 12672-29-6 | PCB- Aroclor 1248                           | 1                   | 1     |
| 37324-23-5 | PCB- Aroclor 1262                           | 1                   | 1     |
| 11100-14-4 | PCB- Aroclor 1268                           | 1                   | 1     |
| 37324-24-6 | PCB- Aroclor 2565                           | 1                   | 1     |
| 11120-29-9 | PCB- Aroclor 4465                           | 1                   | 1     |
| 37353-63-2 | PCB- Kanechlor 300                          | 1                   | 1     |
| 12737-87-0 | PCB- Kanechlor 400                          | 1                   | 1     |
| 37317-41-2 | PCB- Kanechlor 500                          | 1                   | 1     |
| 30525-89-4 | Paraformaldehyde                            | 1000                | 100   |
| 123-63-7   | Paraldehyde                                 | 1000                | 100   |
| 1910-42-5  | Paraquat                                    | 1                   | 1     |
| 2074-50-2  | Paraquat methosulfate                       | 1                   | 1     |
| 56-38-2    | Parathion                                   | 10                  | 1     |
| 19624-22-7 | Pentaborane                                 | 1                   | 1     |
| 608-93-5   | Pentachlorobenzene                          | 1                   | 1     |
| 76-01-7    | Pentachloroethane                           | 10                  | 1     |
| 82-68-8    | Pentachloronitrobenzene                     | 100                 | 1     |
| 87-86-5    | Pentachlorophenol                           | 10                  | 1     |
| 2570-26-5  | Pentadecylamine                             | 1                   | 1     |
| 504-60-9   | 1,3-Pentadiene                              | 100                 | 100   |
| 79-21-0    | Peracetic acid                              | 1                   | 1     |
| 127-18-4   | Perchloroethylene                           | 100                 | 1     |
| 594-42-3   | Perchloromethylmercaptan                    | 100                 | 1     |
| 79-21-0    | Peroxyacetic acid                           | 1                   | 1     |
| 85-01-8    | Phenanthrene                                | 1                   | 1     |
| 578-94-9   | Phenarzine chloride                         | 1                   | 1     |
| 94-78-0    | Phenazopyridine                             | 1                   | 1     |
| 300-62-9   | Phenethylamine, alpha-methyl, (+-)-         | 1                   | 1     |
| 108-95-2   | Phenol                                      | 1000                | 1     |
| 4418-66-0  | Phenol, 2,2'-thiobis(4-chloro-6-methyl-     | 1                   | 1     |
| 131-74-8   | Phenol, 2,4,6-trinitro-, ammonium salt      | 10                  | 1     |
| 120-83-2   | Phenol, 2,4-dichloro-                       | 100                 | 1     |
| 105-67-9   | Phenol, 2,4-dimethyl-                       | 100                 | 1     |
| 51-28-5    | Phenol, 2,4-dinitro-                        | 10                  | 10    |
| 88-85-7    | Phenol, 2,4-dinitro-6-(1-methylpropyl)      | 1000                | 1     |
| 534-52-1   | Phenol, 2,4-dinitro-6-methyl-, and salts    | 10                  | 1     |
| 87-65-0    | Phenol, 2,6-dichloro-                       | 100                 | 100   |
| 95-57-8    | Phenol, 2-chloro-                           | 100                 | 1     |
| 131-89-5   | Phenol, 2-cyclohexyl-4,6-dinitro            | 100                 | 100   |
| 64-00-6    | Phenol, 3-(1-methylethyl)-, methylcarbamate | 1                   | 1     |
| 59-50-7    | Phenol, 4-chloro-3-methyl-                  | 5000                | 100   |

| CAS #      | Substance  | Reportable Quantity |       |   |
|------------|--|---------------------|-------|---|
|            |  | Air                 | Water |   |
| 100-02-7   | Phenol, 4-nitro-   | 100                 | 1     |   |
| 1420-07-1  | Phenol, o-t-butyl-4,6-dinitro-   | 1                   | 1     |   |
| 58-36-6    | Phenoxarsine, 10, 10'-oxydi-   | 1                   | 1     |   |
| 696-28-6   | Phenol dichloroarsine  | 1                   | 1     | A |
| 98-13-5    | Phenol trichlorosilane   | 1                   | 1     |   |
| 140-29-4   | Phenylacetoneitrile  | 1                   | 1     | A |
| 193-39-5   | 1,10-(1,2-Phenylene)pyrene   | 100                 | 1     |   |
| 106-50-3   | p-Phenylendiamine  | 1                   | 1     |   |
| 99-98-9    | p-Phenylenediamine, n,n-dimethyl-  | 1                   | 1     |   |
| 59-88-1    | Phenylhydrazine hydrochloride  | 1                   | 1     |   |
| 108-98-5   | Phenylmercaptan  | 100                 | 100   | A |
| 62-38-4    | Phenylmercuric acetate   | 100                 | 1     | A |
| 2097-19-0  | Phenylsilatrane  | 1                   | 1     |   |
| 57-41-0    | Phenytol (plus sodium salt)  | 1                   | 1     |   |
| 298-02-2   | Phorate  | 10                  | 10    | A |
| 4104-14-7  | Phosacetim   | 1                   | 1     | A |
| 7786-34-7  | Phosdrin   | 10                  | 1     | A |
| 947-02-4   | Phosfolan  | 1                   | 1     | A |
| 75-44-5    | Phosgene   | 10                  | 10    | A |
| 732-11-6   | Phosmet  | 1                   | 1     | A |
| 13171-21-6 | Phosphamidon   | 1                   | 1     | A |
| 7803-51-2  | Phosphine  | 100                 | 100   | A |
| 52-68-6    | Phosphonic acid, (2,2,2-trichloro-1-hydroxyethyl)-, dimethyl ester                   | 100                 | 100   |   |
| 1031-47-6  | Phosphonic diamide, p-(5-amino-3-phenyl-1h-1,2,4-triazol-1-yl)-n,n,n'n'-tetramethyl- | 1                   | 1     | A |
| 676-97-1   | Phosphonic dichloride, methyl-   | 1                   | 1     | A |
| 107-44-8   | Phosphonofluoridic acid, methyl-, isopropyl ester                                    | 1                   | 1     | A |
| 327-98-0   | Phosphonothioic acid, ethyl-, o-ethyl o-(2,4,5-trichlorophenyl) ester                | 1                   | 1     | A |
| 2665-30-7  | Phosphonothioic acid, methyl-, o-(p-nitrophenyl) o-phenyl ester                      | 1                   | 1     | A |
| 2703-13-1  | Phosphonothioic acid, methyl-, o-ethyl o-(4-(methylthio)phenyl) ester                | 1                   | 1     |   |
| 50782-69-9 | Phosphonothioic acid, methyl-, s-[2-[bis   | 1                   | 1     |   |
| 21609-90-5 | Phosphonothioic acid, phenyl-, o-(4-bromo-2,5-dichlorophenyl) o-methyl ester         | 1                   | 1     |   |
| 22224-92-6 | Phosphoramidic acid, isopropyl-, 4-(methylthio)-m-tolyl ethyl ester                  | 1                   | A     |   |
| 77-81-6    | Phosphoramidocyanidic acid, dimethyl-,ethyl ester                                    | 1                   | 1     | A |
| 4104-14-7  | Phosphoramidothioic acid, acetimidoyl-, o,o-bis (p-chlorophenyl) ester               | 1                   | 1     | A |
| 10265-92-6 | Phosphoramidothioic acid, o,s-dimethyl ester   | 1                   | 1     | A |
| 7664-38-2  | Phosphoric acid  | 5000                | 100   |   |
| 470-90-6   | Phosphoric acid, 2-chloro-1-(2,4-dichlorophenyl)vinyl                                |                     |       |   |

| CAS #      | Substance   | Reportable Quantity |       |   |
|------------|---|---------------------|-------|---|
|            |   | Air                 | Water |   |
|            | diethyl ester   | 1                   | 1     | A |
| 311-45-5   | Phosphoric acid, diethyl p-nitrophenyl ester  | 100                 | 100   | A |
| 3254-63-5  | Phosphoric acid, dimethyl p-(methylthio)phenyl ester  | 1                   | 1     | A |
| 13171-21-6 | Phosphoric acid, dimethylester, ester with 2-chloro-n,n-diethyl-3-hydroxycroton amide           | 1                   | 1     | A |
| 7446-27-7  | Phosphoric acid, lead salt  | 1                   | 1     |   |
| 1314-56-3  | Phosphoric anhydride  | 1                   | 1     | A |
| 814-49-3   | Phosphorochloridic acid, diethyl ester  | 1                   | 1     | A |
| 2524-03-0  | Phosphorochloridothioic acid, o, o-dimethyl ester   | 1                   | 1     |   |
| 115-26-4   | Phosphorodiamidic fluoride, tetramethyl-  | 1                   | 1     | A |
| 2275-18-5  | Phosphorodithioic acid, o,o-diethyl ester, s-ester with n-isopropyl-2-mercaptoacetamide         | 1                   | 1     | A |
| 2497-07-6  | Phosphorodithioic acid, o,o-diethyl s-((ethylsulfinyl)ethyl) ester                              | 1                   | A     |   |
| 3288-58-2  | Phosphorodithioic acid, o,o-diethyl s-methyl ester  | 5000                | 100   |   |
| 13071-79-9 | Phosphorodithioic acid, o,o-diethyl s-(((1,1-dimethylethyl)thio)methyl) ester                   | 1                   | 1     | A |
| 732-11-6   | Phosphorodithioic acid, o,o-dimethyl ester, s-ester with n-(mercaptomethyl)phthalimide          | 1                   | 1     | A |
| 2540-82-1  | Phosphorodithioic acid, o,o-dimethyl ester, s-ester with n-formyl-2-mercapto-n-methyl-acetamide | 1                   | 1     |   |
| 60-51-5    | Phosphorodithioic acid, o,o-dimethyl s-[2(methylamino)-2-oxoethyl]ester                         | 10                  | 1     |   |
| 13194-48-4 | Phosphorodithioic acid, o-ethyl s,s-dipropyl ester  | 1                   | 1     | A |
| 3735-23-7  | Phosphorodithioic acid, s-(((2,5-dichlorophenyl)thio)methyl)o,o-dimethyl ester                  | 1                   | 1     |   |
| 786-19-6   | Phosphorodithioic acid, s-(((p-chlorophenyl)thio)methyl)o,o-diethyl ester                       | 1                   | 1     | A |
| 55-91-4    | Phosphorofluoridic acid, bis(1-methylethyl) ester   | 100                 | 1     | A |
| 21923-23-9 | Phosphorodithioic acid, o,o-diethyl o-((2,5-dichloro-4-methylthio)phenyl) ester                 | 1                   | 1     | A |
| 23505-41-1 | Phosphorothioic acid, o,o-diethyl o-(2-(diethylamino)-6-methyl-4-pyrimidinyl) ester             | 1                   | 1     |   |
| 297-97-2   | Phosphorothioic acid, o,o-diethyl o-pyrazinyl ester   | 100                 | 1     | A |
| 2587-90-8  | Phosphorothioic acid, o,o-dimethyl  | 1                   | 1     |   |

| CAS #      | Substance  | Reportable Quantity |       |   |
|------------|--|---------------------|-------|---|
|            |  | Air                 | Water |   |
| 2636-26-2  | Phosphorothioic acid, o,o-dimethyl ester, o-ester with                           |                     |       |   |
|            | p-hydroxybenzonitrile  | 1                   | 1     | A |
| 122-14-5   | Phosphorothioic acid, o,o-dimethyl o-(4-nitro-m-tolyl) ester                     | 1                   | 1     | A |
| 52-85-7    | Phosphorothioic acid, o,o-dimethyl o-[p-[(dimethylamino)-sulfonyl] phenyl] ester | 1000                | 1     | A |
| 919-86-8   | Phosphorothioic acid, s-(2-(ethylthio)ethyl) o,o-dimethyl ester                  | 1                   | 1     | A |
| 3734-97-2  | Phosphorothioic acid, s-(2-diethylamino)ethyl) o,o-diethyl ester, oxalate (1:1)  | 1                   | 1     | A |
| 7723-14-0  | Phosphorus   | 1                   | 1     | A |
| 10025-87-3 | Phosphorus oxychloride   | 1000                | 100   | A |
| 10026-13-8 | Phosphorus pentachloride   | 1                   | 1     |   |
| 1314-80-3  | Phosphorus pentasulfide  | 100                 | 100   |   |
| 1314-56-3  | Phosphorus pentoxide   | 1                   | 1     | A |
| 7719-12-2  | Phosphorus trichloride   | 1000                | 100   | A |
| 10025-87-3 | Phosphoryl chloride  | 1000                | 100   | A |
| 85-44-9    | Phthalic anhydride   | 5000                | 1     |   |
| 57-47-6    | Physostigmine  | 1                   | 1     |   |
| 57-64-7    | Physostigmine, salicylate (1:1)  | 1                   | 1     |   |
| 109-06-8   | Picoline   | 5000                | 100   |   |
| 124-87-8   | Picrotoxin   | 1                   | 1     |   |
| 83-26-1    | Pindone  | 1                   | 1     |   |
| 110-89-4   | Piperidine   | 1                   | 1     | A |
| 23505-41-1 | Pirimifos-ethyl  | 1                   | 1     |   |
| 83-26-1    | Pival  | 1                   | 1     |   |
| 12737-87-0 | Polychlorinated biphenyl (Kanechlor 400)   | 1                   | 1     |   |
| 11097-69-1 | Polychlorinated biphenyls (PCB)  | 1                   | 1     |   |
| 11104-28-2 | Polychlorinated biphenyls (PCB)  | 1                   | 1     |   |
| 1336-36-3  | Polychlorinated biphenyls (PCB)  | 1                   | 1     |   |
| 11141-16-5 | Polychlorinated biphenyls (PCB)  | 1                   | 1     |   |
| 11096-82-5 | Polychlorinated biphenyls (PCB)  | 1                   | 1     |   |
| 61788-33-8 | Polychlorinated terphenyls   | 1                   | 1     |   |
| 7784-41-0  | Potassium arsenate   | 1                   | 1     |   |
| 10124-50-2 | Potassium arsenite   | 1                   | 1     | A |
| 7778-50-9  | Potassium bichromate   | 10                  | 10    |   |
| 7789-00-6  | Potassium chromate   | 10                  | 10    |   |
| 151-50-8   | Potassium cyanide  | 10                  | 1     | A |
| 1310-58-3  | Potassium hydroxide  | 1000                | 100   |   |
| 7722-64-7  | Potassium permanganate   | 100                 | 100   |   |
| 506-61-6   | Potassium silver cyanide   | 1                   | 1     | A |
| 671-16-9   | Procarbazine   | 1                   | 1     |   |
| 2631-37-0  | Promecarb  | 1                   | 1     |   |
| 23950-58-5 | Pronamide  | 5000                | 1     |   |
| 765-34-4   | 1-Propanal, 2,3-epoxy-   | 10                  | 1     |   |
| 142-84-7   | 1-Propanamine, n-propyl-   | 5000                | 1     |   |
| 1120-71-4  | Propane sultone  | 10                  | 10    |   |
| 1120-71-4  | 1,3-Propane sultone  | 10                  | 10    |   |
| 96-12-8    | Propane, 1,2-dibromo-3-chloro-   | 1                   | 1     | A |

| CAS #      | Substance  | Reportable Quantity |       |
|------------|--|---------------------|-------|
|            |  | Air                 | Water |
| 79-46-9    | Propane, 2-nitro-  | 10                  | 1     |
| 108-60-1   | Propane,2,2'-oxybis(2-chloro-                                      | 1000                | 100   |
| 109-77-3   | Propanedinitrile   | 1000                | 1     |
| 824-11-3   | 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-,cyclic phosphite (1:1) | 1                   | 1     |
| 107-12-0   | Propanenitrile   | 10                  | 1     |
| 75-86-5    | Propanenitrile, 2-hydroxy-2-methyl-                                | 10                  | 1     |
| 542-76-7   | Propanenitrile, 3-chloro-  | 1000                | 1     |
| 55-63-0    | 1,2,3-Propanetriol, trinitrate-                                    | 10                  | 10    |
| 97-63-2    | 2-Propanoic acid, 2-methyl-, ethyl ester                           | 1000                | 1     |
| 78-83-1    | 1-Propanol, 2-methyl-  | 5000                | 1     |
| 67-64-1    | 2-Propanone  | 5000                | 1     |
| 598-31-2   | 2-Propanone, 1-bromo-  | 1000                | 100   |
| 2312-35-8  | Propargite   | 10                  | 10    |
| 107-19-7   | Propargyl alcohol  | 1000                | 100   |
| 106-96-7   | Propargyl bromide  | 1                   | 1     |
| 107-18-6   | 2-Propen-1-ol  | 100                 | 100   |
| 107-02-8   | 2-Propenal   | 1                   | 1     |
| 79-06-1    | 2-Propenamide  | 5000                | 100   |
| 1888-71-7  | 1-Propene, 1,1,2,3,3,3-hexachloro-                                 | 1000                | 100   |
| 542-75-6   | Propene, 1,3-dichloro-   | 5000                | 1     |
| 10476-95-6 | 2-Propene-1,1-diol, 2-methyl-, diacetate                           | 1                   | 1     |
| 107-13-1   | 2-Propenenitrile   | 100                 | 1     |
| 126-98-7   | 2-Propenenitrile,2-methyl-   | 1                   | 1     |
| 79-10-7    | 2-Propenoic acid   | 5000                | 100   |
| 80-62-6    | 2-Propenoic acid, 2-methyl-, methyl ester                          | 1000                | 1     |
| 140-88-5   | 2-Propenoic acid, ethyl ester                                      | 1000                | 1     |
| 57-57-8    | Propiolactone, beta-   | 1                   | 1     |
| 123-38-6   | Propionaldehyde  | 1                   | 1     |
| 79-09-4    | Propionic acid   | 5000                | 100   |
| 123-62-6   | Propionic anhydride  | 5000                | 100   |
| 70-69-9    | Propiophenone, 4'-amino  | 1                   | 1     |
| 114-26-1   | Propoxur   | 1                   | 1     |
| 109-61-5   | Propyl chloroformate   | 1                   | 1     |
| 107-10-8   | n-Propylamine  | 5000                | 1     |
| 78-87-5    | Propylene dichloride   | 1000                | 1     |
| 75-55-8    | Propylene imine  | 1                   | 1     |
| 75-56-9    | Propylene oxide  | 100                 | 100   |
| 75-55-8    | 1,2-Propylenimine  | 1                   | 1     |
| 51-52-5    | Propylthiouracil   | 1                   | 1     |
| 107-19-7   | 2-Propyn-1-ol  | 1000                | 100   |
| 106-96-7   | Propyne, 3-bromo-  | 1                   | 1     |
| 2275-18-5  | Prothoate  | 1                   | 1     |
| 129-00-0   | Pyrene   | 5000                | 1     |
| 8003-34-7  | Pyrethrins   | 1                   | 1     |
| 121-21-1   | Pyrethrins   | 1                   | 1     |
| 121-29-9   | Pyrethrins   | 1                   | 1     |
| 504-24-5   | 4-Pyridinamine   | 1000                | 1     |
| 110-86-1   | Pyridine   | 1                   | 1     |



| CAS #      | Substance  | Reportable Quantity |       |
|------------|--|---------------------|-------|
|            |  | Air                 | Water |
| 140-76-1   | Pyridine, 2-methyl-5-vinyl-                          | 1                   | 1     |
| 1124-33-0  | Pyridine, 4-nitro-, 1-oxide                          | 1                   | 1     |
| 140-76-1   | Pyridine, 5-ethenyl-2-methyl                         | 1                   | 1     |
| 100-75-4   | Pyridine, hexahydro-n-nitroso-                       | 10                  | 10    |
| 91-80-5    | Pyridine,2-[(2-(dimethylamino)ethyl)-2-thenylamino]- | 5000                | 100   |
| 109-06-8   | Pyridine, 2-methyl-                                  | 5000                | 100   |
| 535-89-7   | Pyrimidine, 2-chloro-4-(dimethylamino)-6-methyl-     | 1                   | 1     |
| 56-04-2    | 4(1h)-Pyrimidinone,2,3-dihydro-6-methyl-2-thioxo-    | 10                  | 10    |
| 53558-25-1 | Pyriminil  | 1                   | 1     |
| 8014-95-7  | Pyrosulfuric acid                                    | 1000                | 100   |
| 930-55-2   | Pyrrole, tetrahydro-n-nitroso-                       | 1                   | 1     |
| 630-60-4   | Quabain  | 1                   | 1     |
| 91-22-5    | Quinoline  | 5000                | 1     |
| 106-51-4   | Quinone  | 1                   | 1     |
| 50-55-5    | Reserpine  | 5000                | 1     |
| 108-46-3   | Resorcinol   | 5000                | 1     |
| 81-07-2    | Saccharin and salts                                  | 100                 | 100   |
| 94-59-7    | Safrole  | 100                 | 1     |
| 14167-18-1 | Salcomine  | 1                   | 1     |
| 107-44-8   | Sarin  | 1                   | 1     |
| 7791-23-3  | Seleninyl chloride                                   | 1                   | 1     |
| 7783-00-8  | Selenious acid                                       | 10                  | 10    |
| 7782-49-2  | Selenium (see footnote [FN1])                        | 100                 | 100   |
| 7446-08-4  | Selenium dioxide                                     | 10                  | 10    |
| 7488-56-4  | Selenium disulfide                                   | 10                  | 10    |
| 7446-08-4  | Selenium oxide                                       | 10                  | 10    |
| 7791-23-3  | Selenium oxychloride                                 | 1                   | 1     |
| 630-10-4   | Selenourea   | 1000                | 100   |
| 563-41-7   | Semicarbazide hydrochloride                          | 1                   | 1     |
| 115-02-6   | 1-Serine, diazoacetate (ester)                       | 1                   | 1     |
| 3037-72-7  | Silane, (4-aminobutyl)diethoxymethyl-                | 1                   | 1     |
| 27137-85-5 | Silane, (dichlorophenyl)trichloro-                   | 1                   | 1     |
| 149-74-6   | Silane, dichloromethylphenyl-                        | 1                   | 1     |
| 998-30-1   | Silane, triethoxy-                                   | 1                   | 1     |
| 7440-22-4  | Silver (see footnote [FN1])                          | 1000                | 100   |
| 506-64-9   | Silver cyanide                                       | 1                   | 1     |
| 7761-88-8  | Silver nitrate                                       | 1                   | 1     |
| 7440-23-5  | Sodium   | 10                  | 10    |
| 7631-89-2  | Sodium arsenate                                      | 1                   | 1     |
| 7784-46-5  | Sodium arsenite                                      | 1                   | 1     |
| 26628-22-8 | Sodium azide   | 1000                | 100   |
| 10588-01-9 | Sodium bichromate                                    | 10                  | 10    |
| 1333-83-1  | Sodium bifluoride                                    | 5000                | 100   |
| 7631-90-5  | Sodium bisulfite                                     | 5000                | 100   |
| 124-65-2   | Sodium cacodylate                                    | 1                   | 1     |
| 7775-11-3  | Sodium chromate                                      | 10                  | 10    |
| 143-33-9   | Sodium cyanide                                       | 10                  | 1     |
| 25155-30-0 | Sodium dodecylbenzene sulfonate                      | 1000                | 100   |
| 7681-49-4  | Sodium fluoride                                      | 1000                | 100   |

| CAS #      | Substance                                | Reportable Quantity |       |   |
|------------|--|---------------------|-------|---|
|            |  | Air                 | Water |   |
| 62-74-8    | Sodium fluoroacetate                     | 10                  | 1     | A |
| 1333-83-1  | Sodium hydrogen fluoride                 | 5000                | 100   |   |
| 16721-80-5 | Sodium hydrosulfide                      | 5000                | 100   |   |
| 7631-90-5  | Sodium hydrosulfite                      | 5000                | 100   |   |
| 1310-73-2  | Sodium hydroxide                         | 1000                | 100   |   |
| 7681-52-9  | Sodium hypochlorite                      | 100                 | 100   |   |
| 10022-70-5 | Sodium hypochlorite                      | 100                 | 100   |   |
| 124-41-4   | Sodium methylate                         | 1000                | 100   |   |
| 7632-00-0  | Sodium nitrite                           | 100                 | 100   |   |
| 10140-65-5 | Sodium phosphate, dibasic                | 5000                | 100   |   |
| 10039-32-4 | Sodium phosphate, dibasic                | 5000                | 100   |   |
| 7558-79-4  | Sodium phosphate, dibasic                | 5000                | 100   |   |
| 7758-29-4  | Sodium phosphate, tribasic               | 5000                | 100   |   |
| 10361-89-4 | Sodium phosphate, tribasic               | 5000                | 100   |   |
| 10101-89-0 | Sodium phosphate, tribasic               | 5000                | 100   |   |
| 10124-56-8 | Sodium phosphate, tribasic               | 5000                | 100   |   |
| 7601-54-9  | Sodium phosphate, tribasic               | 5000                | 100   |   |
| 7785-84-4  | Sodium phosphate, tribasic               | 5000                | 100   |   |
| 13410-01-0 | Sodium selenate                          | 1                   | 1     | A |
| 7782-82-3  | Sodium selenite                          | 1000                | 100   |   |
| 10102-18-8 | Sodium selenite                          | 100                 | 100   | A |
| 10102-20-2 | Sodium tellurite                         | 1                   | 1     |   |
| 900-95-8   | Stannane, acetoxyltriphenyl              | 1                   | 1     |   |
| 1066-45-1  | Stannane, chlorotrimethyl-               | 1                   | 1     |   |
| 639-58-7   | Stannane, chlorotriphenyl-               | 1                   | 1     |   |
| 597-64-8   | Stannane, tetraethyl-                    | 1                   | 1     | A |
| 56-53-1    | 4,4'-Stilbenediol, alpha,alpha'-diethyl- | 10                  | 1     |   |
| 18883-66-4 | Streptozotacin                           | 1                   | 1     |   |
| 8001-50-1  | Strobane                                 | 1                   | 1     |   |
| 7789-06-2  | Strontium chromate                       | 10                  | 10    |   |
| 357-57-3   | Strychnidin-10-one, 2,3-dimethoxy-       | 10                  | 1     | A |
| 57-24-9    | Strychnine and salts                     | 10                  | 1     | A |
| 60-41-3    | Strychnine, sulfate                      | 1                   | 1     | A |
| 100-42-5   | Styrene                                  | 1000                | 1     |   |
| 96-09-3    | Styrene oxide                            | 1                   | 1     |   |
| 505-60-2   | Sulfide, bis(2-chloroethyl)              | 1                   | 1     | A |
| 3569-57-1  | Sulfoxide, 3-chloropropyl octyl          | 1                   | 1     | A |
| 7446-09-5  | Sulfur dioxide                           | 1                   | 1     |   |
| 12771-08-3 | Sulfur monochloride                      | 1000                | 100   |   |
| 1314-80-3  | Sulfur phosphide                         | 100                 | 100   |   |
| 7783-60-0  | Sulfur tetrafluoride                     | 1                   | 1     |   |
| 7446-11-9  | Sulfur trioxide                          | 1                   | 1     |   |
| 7664-93-9  | Sulfuric acid                            | 1000                | 100   |   |
| 8014-95-7  | Sulfuric acid                            | 1000                | 100   |   |
| 77-78-1    | Sulfuric acid, dimethyl ester            | 100                 | 100   |   |
| 7446-11-9  | Sulfuric anhydride                       | 1                   | 1     |   |
| 2699-79-8  | Sulfuryl fluoride                        | 1                   | 1     |   |
| 93-76-5    | 2,4,5-T Acid                             | 1000                | 1     |   |
| 6369-96-6  | 2,4,5-T Amines                           | 5000                | 100   |   |
| 6369-97-7  | 2,4,5-T Amines                           | 5000                | 100   |   |
| 1319-72-8  | 2,4,5-T Amines                           | 5000                | 100   |   |
| 2008-46-0  | 2,4,5-T Amines                           | 5000                | 100   |   |
| 3813-14-7  | 2,4,5-T Amines                           | 5000                | 100   |   |

| CAS #      | Substance  | Reportable Quantity |       |   |
|------------|--|---------------------|-------|---|
|            |  | Air                 | Water |   |
| 2545-59-7  | 2,4,5-T Esters                                   | 1000                | 100   |   |
| 93-79-8    | 2,4,5-T Esters                                   | 1000                | 100   |   |
| 25168-15-4 | 2,4,5-T Esters                                   | 1000                | 1     |   |
| 61792-07-2 | 2,4,5-T Esters                                   | 1000                | 100   |   |
| 1928-47-8  | 2,4,5-T Esters                                   | 1000                | 100   |   |
| 13560-99-1 | 2,4,5-T Salts                                    | 1000                | 100   |   |
| 72-54-8    | TDE  | 1                   | 1     |   |
| 72-54-8    | TDE (1,1-dichloro-2,2-bis-(p-chlorophenyl) ether | 1                   | 1     |   |
| 3689-24-5  | TEDP   | 100                 | 1     | A |
| 107-49-3   | TEPP   | 10                  | 10    | A |
| 1836-75-5  | TOK  | 1                   | 1     |   |
| 93-72-1    | 2,4,5-TP Acid                                    | 100                 | 100   |   |
| 32534-95-5 | 2,4,5-TP Acid esters                             | 100                 | 100   |   |
| 77-81-6    | Tabun  | 1                   | 1     | A |
| 10102-20-2 | Telluric acid, disodium salt                     | 1                   | 1     |   |
| 13494-80-9 | Tellurium  | 1                   | 1     |   |
| 7783-80-4  | Tellurium hexafluoride                           | 1                   | 1     |   |
| 13071-79-9 | Terbufos   | 1                   | 1     | A |
| 76-11-9    | 1,1,1,2-Tetrachloro-2,2-difluoroethane           | 1                   | 1     |   |
| 95-94-3    | Tetrachlorobenzene                               | 5000                | 100   |   |
| 95-94-3    | 1,2,4,5-Tetrachlorobenzene                       | 5000                | 100   |   |
| 1746-01-6  | 2,3,7,8-Tetrachlorodibenzo-p-dioxin              | 1                   | 1     | A |
| 630-20-6   | 1,1,1,2-Tetrachloroethane                        | 100                 | 1     |   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane                        | 100                 | 1     |   |
| 127-18-4   | Tetrachloroethylene                              | 100                 | 1     |   |
| 58-90-2    | 2,3,4,6-Tetrachlorophenol                        | 10                  | 10    |   |
| 78-00-2    | Tetraethyl lead                                  | 10                  | 10    | A |
| 107-49-3   | Tetraethyl pyrophosphate                         | 10                  | 10    | A |
| 3689-24-5  | Tetraethyldithiopyrophospate                     | 100                 | 1     | A |
| 597-64-8   | Tetraethyltin                                    | 1                   | 1     | A |
| 109-99-9   | Tetrahydrofuran                                  | 1000                | 100   |   |
| 75-74-1    | Tetramethyl lead                                 | 1                   | 1     |   |
| 509-14-8   | Tetranitromethane                                | 10                  | 1     | A |
| 757-58-4   | Tetrphosphoric acid, hexaethylester              | 100                 | 1     | A |
| 1314-32-5  | Thallic oxide                                    | 100                 | 100   | A |
| 563-68-8   | Thallium (I) acetate                             | 1                   | 1     |   |
| 12039-52-0 | Thallium (I) selenite                            | 1000                | 100   |   |
| 7446-18-6  | Thallium (I) sulfate                             | 100                 | 100   | A |
| 7440-28-0  | Thallium (see footnote [FN1])                    | 1000                | 100   |   |
| 6533-73-9  | Thallium (I) carbonate                           | 100                 | 100   |   |
| 7791-12-0  | Thallium (I) chloride                            | 100                 | 100   |   |
| 10102-45-1 | Thallium (I) nitrate                             | 100                 | 100   |   |
| 10031-59-1 | Thallium (I) sulfate                             | 100                 | 100   | A |
| 2757-18-8  | Thallos malonate                                 | 1                   | 1     | A |
| 2231-57-4  | Thiocarbazide                                    | 1                   | 1     |   |
| 542-90-5   | Thiocyanic acid, ethyl ester                     | 1                   | 1     |   |
| 556-64-9   | Thiocyanic acid, methyl ester                    | 1                   | 1     |   |
| 39196-18-4 | Thiofanox  | 100                 | 1     | A |
| 541-53-7   | Thioimidodicarbonic diamide                      | 100                 | 100   | A |
| 74-93-1    | Thiomethanol                                     | 100                 | 100   |   |

| CAS #      | Substance                                 | Reportable Quantity |       |   |
|------------|---|---------------------|-------|---|
|            |   | Air                 | Water |   |
| 108-98-5   | Thiophenol                                | 100                 | 100   | A |
| 79-19-6    | Thiosemicarbazide                         | 100                 | 1     | A |
| 52-24-4    | Thiotepa                                  | 1                   | 1     |   |
| 62-56-6    | Thiourea                                  | 10                  | 10    |   |
| 5344-82-1  | Thiourea, (2-chlorophenyl)-               | 100                 | 100   | A |
| 614-78-8   | Thiourea, (2-methylphenyl)-               | 1                   | 1     |   |
| 86-88-4    | Thiourea, 1-naphthalenyl                  | 100                 | 1     | A |
| 103-85-5   | Thiourea, phenyl-                         | 100                 | 1     | A |
| 137-26-8   | Thiram                                    | 10                  | 10    |   |
| 7550-45-0  | Titanium tetrachloride                    | 1                   | 1     | A |
| 108-88-3   | Toluene                                   | 1000                | 1     |   |
| 26471-62-5 | Toluene diisocyanite                      | 100                 | 100   |   |
| 584-84-9   | Toluene diisocyanite                      | 100                 | 1     |   |
| 91-08-7    | Toluene diisocyanite                      | 100                 | 1     |   |
| 100-14-1   | Toluene, alpha-chloro-p-nitro-            | 1                   | 1     |   |
| 88-72-2    | Toluene, o-nitro-                         | 1000                | 100   |   |
| 95-80-7    | Toluene-2,4-diamine                       | 10                  | 1     |   |
| 496-72-0   | Toluenediamine                            | 10                  | 1     |   |
| 823-40-5   | Toluenediamine                            | 10                  | 1     |   |
| 25376-45-8 | Toluenediamine                            | 10                  | 1     |   |
| 95-53-4    | o-Toluidine                               | 100                 | 1     |   |
| 106-49-0   | p-Toluidine                               | 100                 | 1     |   |
| 636-21-5   | o-Toluidine hydrochloride                 | 100                 | 1     |   |
| 98-16-8    | m-Toluidine, alpha,alpha,alpha-trifluoro- | 1                   | 1     | A |
| 8001-35-2  | Toxaphene                                 | 1                   | 1     | A |
| 299-75-2   | Treosulphan                               | 1                   | 1     |   |
| 688-73-3   | Tri-n-butyltin hydride                    | 1                   | 1     |   |
| 56-35-9    | Tri-n-butyltin oxide                      | 1                   | 1     |   |
| 1031-47-6  | Triamphos                                 | 1                   | 1     | A |
| 675-14-9   | s-Triazine, 2,4,6-trifluoro-              | 1                   | 1     | A |
| 68-76-8    | Triaziquone                               | 1                   | 1     |   |
| 24017-47-8 | Triazofos                                 | 1                   | 1     |   |
| 61-82-5    | 1h-1,2,4-Triazol-3-amine                  | 10                  | 1     |   |
| 52-68-6    | Trichlorfon                               | 100                 | 100   |   |
| 1558-25-4  | Trichloro(chloromethyl)silane             | 1                   | 1     |   |
| 27137-85-5 | Trichloro(dichlorophenyl)silane           | 1                   | 1     |   |
| 76-13-1    | 1,1,2-Trichloro-1,2,2-trifluoroethane     | 1                   | 1     |   |
| 76-02-8    | Trichloroacetyl chloride                  | 1                   | 1     |   |
| 120-82-1   | 1,2,4-Trichlorobenzene                    | 100                 | 100   |   |
| 71-55-6    | 1,1,1-Trichloroethane                     | 1000                | 1     |   |
| 79-00-5    | 1,1,2-Trichloroethane                     | 100                 | 1     |   |
| 79-01-6    | Trichloroethylene                         | 100                 | 1     |   |
| 115-21-9   | Trichloroethylsilane                      | 1                   | 1     |   |
| 594-42-3   | Trichloromethanesulfonyl chloride         | 100                 | 1     |   |
| 75-69-4    | Trichloromonofluoromethane                | 5000                | 1     |   |
| 327-98-0   | Trichloronate                             | 1                   | 1     | A |
| 25167-82-2 | Trichlorophenol                           | 10                  | 10    |   |
| 15950-66-0 | 2,3,4-Trichlorophenol                     | 10                  | 1     |   |
| 933-78-8   | 2,3,5-Trichlorophenol                     | 10                  | 1     |   |
| 95-95-4    | 2,4,5-Trichlorophenol                     | 10                  | 1     |   |
| 88-06-2    | 2,4,6-Trichlorophenol                     | 10                  | 1     |   |
| 609-19-8   | 3,4,5-Trichlorophenol                     | 10                  | 1     |   |

| CAS #      | Substance                            | Reportable Quantity |       |   |
|------------|--------------------------------------|---------------------|-------|---|
|            |                                      | Air                 | Water |   |
| 93-76-5    | 2,4,5-Trichlorophenoxyacetic acid    | 1000                | 1     |   |
| 933-75-5   | 2,3,6-Trichlorophenyl                | 10                  | 1     |   |
| 98-13-5    | Trichlorophenylsilane                | 1                   | 1     |   |
| 27323-41-7 | Triethanolamine                      |                     |       |   |
|            | dodecylbenzenesulfonate              | 1000                | 1     |   |
| 998-30-1   | Triethoxysilane                      | 1                   | 1     |   |
| 121-44-8   | Triethylamine                        | 5000                | 1     |   |
| 555-77-1   | Triethylamine, 2,2',2''-trichloro-   | 1                   | 1     | A |
| 538-07-8   | Triethylamine, 2,2'-dichloro-        | 1                   | 1     | A |
| 75-50-3    | Trimethylamine                       | 100                 | 1     |   |
| 75-77-4    | Trimethylchlorosilane                | 1                   | 1     |   |
| 824-11-3   | Trimethylolpropane phosphite         | 1                   | 1     | A |
| 540-84-1   | 2,2,4-Trimethylpentane               | 1                   | 1     |   |
| 1066-45-1  | Trimethyltin chloride                | 1                   | 1     |   |
| 99-35-4    | 1,3,5-Trinitrobenzene                | 1                   | 1     |   |
| 99-35-4    | sym-Trinitrobenzene                  | 1                   | 1     |   |
| 2097-19-0  | 2,8,9-Trioxa-5-aza-1-silabicyclo     |                     |       |   |
|            | (3.3.3)undecane, phenyl-             | 1                   | 1     |   |
| 123-64-7   | 1,3,5-Trioxane, 2,4,6-trimethyl-     | 1000                | 100   |   |
| 639-58-7   | Triphenyltin chloride                | 1                   | 1     |   |
| 1582-09-8  | Tripluralin                          | 1                   | 1     |   |
| 126-72-7   | Tris(2,3-dibromopropyl) phosphate    | 10                  | 10    |   |
| 555-77-1   | Tris(2-chloroethyl)amine             | 1                   | 1     | A |
| 72-57-1    | Trypan Blue                          | 10                  | 10    |   |
| 66-75-1    | Uracil mustard                       | 10                  | 10    | A |
| 66-75-1    | Uracil, 5-[bis(2-chloroethyl)amino]- | 10                  | A     |   |
| 51-21-8    | Uracil, 5-fluoro-                    | 1                   | 1     |   |
| 541-09-3   | Uranyl acetate                       | 5000                | 100   |   |
| 36478-76-9 | Uranyl nitrate                       | 5000                | 100   |   |
| 10102-06-4 | Uranyl nitrate                       | 5000                | 100   |   |
| 614-78-8   | Urea, 2-thio-1-o-tolyl-              | 1                   | 1     |   |
| 1982-47-4  | Urea, 3-(p-(p-chlorophenoxy)         |                     |       |   |
|            | phenyl)-1,1-dimethyl-                | 1                   | 1     |   |
| 2001-95-8  | Valinomycin                          | 1                   | 1     |   |
| 83-28-3    | Valone                               | 1                   | 1     |   |
| 7803-55-6  | Vanadic acid, ammonium salt          | 1000                | 100   | A |
| 1314-62-1  | Vanadium pentoxide                   | 1000                | 100   | A |
| 1314-62-1  | Vanadium(V) oxide                    | 1000                | 100   | A |
| 27774-13-6 | Vanadyl sulfate                      | 1000                | 100   |   |
| 108-05-4   | Vinyl acetate                        | 5000                | 1     |   |
| 593-60-2   | Vinyl bromide                        | 1                   | 1     |   |
| 75-01-4    | Vinyl chloride                       | 1                   | 1     |   |
| 75-35-4    | Vinylidene chloride                  | 100                 |       |   |
| 81-81-2    | Warfarin                             | 100                 | 100   |   |
| 129-06-6   | Warfarin sodium                      | 1                   | 1     | A |
| 108-38-3   | m-Xylene                             | 1000                | 100   |   |
| 95-47-6    | o-Xylene                             | 1000                | 1     |   |
| 106-42-3   | p-Xylene                             | 1000                | 100   |   |
| 1330-20-7  | Xylene (mixed)                       | 1000                | 1     |   |
| 1300-71-6  | Xylenol                              | 1000                | 100   |   |
| 105-67-9   | Xylenol                              | 100                 | 1     |   |
| 28347-13-9 | Xylene dichloride                    | 1                   | 1     | A |
| 50-55-5    | Yohimban-16-carboxylic acid, 11,     |                     |       |   |
|            | 17-dimethoxy-18-[(3,4,               |                     |       |   |

| CAS #      | Substance   | Reportable Quantity |       |   |
|------------|---|---------------------|-------|---|
|            |   | Air                 | Water |   |
|            | 5-trimethoxybenzoyl)oxy]-, methylester  | 5000                | 1     |   |
| 7440-66-6  | Zinc (see footnote [FN1])   | 1000                | 100   |   |
| 557-34-6   | Zinc acetate  | 1000                | 100   |   |
| 52628-25-8 | Zinc ammonium chloride  | 5000                | 100   |   |
| 14639-97-5 | Zinc ammonium chloride  | 5000                | 100   |   |
| 14639-98-6 | Zinc ammonium chloride  | 5000                | 100   |   |
| 1332-07-6  | Zinc borate   | 1000                | 100   |   |
| 7699-45-8  | Zinc bromide  | 5000                | 100   |   |
| 3486-35-9  | Zinc carbonate  | 1000                | 100   |   |
| 7646-85-7  | Zinc chloride   | 5000                | 100   |   |
| 557-21-1   | Zinc cyanide  | 10                  | 10    |   |
| 7783-49-5  | Zinc fluoride   | 1000                | 100   |   |
| 557-41-5   | Zinc formate  | 1000                | 100   |   |
| 7779-86-4  | Zinc hydrosulfite   | 1000                | 100   |   |
| 7779-88-6  | Zinc nitrate  | 5000                | 100   |   |
| 127-82-2   | Zinc phenolsulfonate  | 5000                | 100   |   |
| 1314-84-7  | Zinc phosphide  | 100                 | 100   | A |
| 16871-71-9 | Zinc silicofluoride   | 5000                | 100   |   |
| 7733-02-0  | Zinc sulfate  | 1000                | 100   |   |
| 58270-08-9 | Zinc, dichloro(4,4-dimethyl-5((((methylamino)carbonyl)oxy)imino)pentanenitrile)-,(t-4)- | 1                   | 1     | A |
| 13746-89-9 | Zirconium nitrate   | 5000                | 100   |   |
| 16923-95-8 | Zirconium potassium fluoride  | 1000                | 100   |   |
| 14644-61-2 | Zirconium sulfate   | 5000                | 100   |   |
| 10026-11-6 | Zirconium tetrachloride   | 5000                | 100   |   |

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Footnotes

[TFN1] Notification of the release of an RQ (Reportable Quantity) of solid particles of antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium or zinc is not required if the mean diameter of the particles released is larger than 100 micrometers (0.004 inches).

[TFN2] Substances noted "A" are acutely hazardous substances.

## SECTION 4

### HAZARDOUS WASTE MANAGEMENT

#### New York Supplement, March 2010

This section covers the state requirements for Hazardous Waste Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Approved Program or Approved State* - a state which has been approved or authorized by the U.S. Environmental Protection Agency (USEPA) under 40 CFR part 271 (see section 370.1(e) of this part) (6 New York Codes of Rules and Regulations (6 NYCRR) 370.2).
- *Aquifer* - a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs (6 NYCRR 370.2).
- *Authorized Representative* - the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), such as the plant manager, superintendent or person of equivalent responsibility (6 NYCRR 370.2).
- *Authorized Treatment, Storage, or Disposal Facility or Authorized Facility* - with respect to a particular hazardous waste means a treatment, storage or disposal facility which is authorized, under the laws and regulations of both the Federal Government and the state in which it is located, to accept the hazardous waste for treatment, storage or disposal (6 NYCRR 370.2).
- *Commissioner* - the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's designee (6 NYCRR 370.2).
- *Designated Treatment, Storage, or Disposal Facility or Designated Facility* - a hazardous waste treatment, storage or disposal facility which:
  1. has received an USEPA or Part 373 permit (or interim status) from an approved state
  2. is a facility which beneficially uses or reuses, or legitimately recycles or reclaims hazardous waste, or treats hazardous waste prior to beneficial use or reuse, or legitimate recycling or reclamation
  3. has been designated on the manifest by the generator pursuant to section 372.2(b) of this title. If a waste is destined to a facility in an authorized state which has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility must be a facility allowed by the receiving state to accept such waste (6 NYCRR 370.2).
- *Director* - the Director of the Division of Hazardous Substances Regulation of the New York State Department of Environmental Conservation or the Director's designee (6 NYCRR 370.2).
- *Disposal* - the abandonment, discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste, including hazardous waste, into or onto any lands or waters, of the state, so that such waste or hazardous waste or any related constituent thereof may enter the environment, or be emitted to the air, or discharged to any waters, including groundwaters thereof. Disposal also means the thermal destruction of wastes or hazardous waste and the burning of such wastes as fuel for the purpose of recovering usable energy (6 NYCRR 370.2).
- *Disposal Facility* - a facility or part of the facility at which solid waste, including hazardous waste, is intentionally placed into or on any air, land or water, and at which waste will remain after closure. The term

disposal facility does not include a correction action management unit into which remediation wastes are placed (6 NYCRR 370.2).

- *Disposer State* - the state in which the designed treatment, storage, or disposal facility is located (6 NYCRR 370.2).
- *Division* - the Division of Solid and Hazardous Waste of the New York State Department of Environmental Conservation (6 NYCRR 370.2).
- *Environmental Media* - naturally occurring, nonliving substances, including soil, sediment, rock, groundwater, surface water, surface runoff, air, and only such animal and vegetable matters as may be incidentally contained therein (e.g., soil and water bacteria, underground roots, skeletal remains, etc.) (6 NYCRR 371.4(e)).
- *Facility* -
  1. All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).
  2. For the purpose of implementing corrective action under section 373-2.6(l) of this title, all contiguous property under the control of the owner or operator seeking a permit under subtitle C of RCRA or article 27, Title 9 of the ECL. This definition also applies to facilities implementing corrective action under Subpart 373-2 of this title or RCRA section 3008(h)
  3. Notwithstanding subparagraph (2) of this definition, a remediation waste management site is not a facility that is subject to subdivision 373-2.6(l), Corrective Action for Solid Waste Management Units, of this Title, but is subject to corrective action requirements if the site is located within such a facility. (6 NYCRR 370.2) [Revised March 2003].
- *Federal Agency* - any department, agency, or other instrumentality of the Federal government, and any government corporation and the Government Printing Office (6 NYCRR 370.2) [Revised March 2003].
- *Federal, State, and Local Approvals or Permits Necessary to Begin Physical Construction* - permits and approvals required under Federal, state or local hazardous waste control statutes, regulations or ordinances (6 NYCRR 370.2).
- *Hazardous Waste Management* - the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous waste (6 NYCRR 370.2).
- *Hazardous Waste Management Facility (HWM Facility)* - all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (6 NYCRR 370.2).
- *Hazardous Waste Management Unit* - a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system, and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed (6 NYCRR 370.2).
- *Households* - include, but are not limited to, single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, camp grounds, picnic grounds, and day use recreation areas (see Household hazardous waste) (6 NYCRR 370.2)
- *Household Hazardous Waste* - household waste that, but for its point of origin, would be a hazardous waste under Part 371 of this title and includes all pesticides as defined in ECL article 33, that originate from a household (6 NYCRR 370.2).



- *Household Hazardous Waste Collection Facility* - any facility or site authorized, under Subpart 373-4 of this title, to accept household hazardous waste, or waste from conditionally exempt small quantity generators or eligible farmers on a temporary, periodic, or permanent basis (6 NYCRR 370.2).
- *Manifest* - a Uniform Hazardous Waste Manifest and Instructions as found in Appendix 30, infra, a shipping document USEPA form 8700-22, or any other shipping document having been approved by the commissioner and administrator (6 NYCRR 370.2).
- *Operator* - the person who is responsible for the overall operation of a hazardous waste management facility (6 NYCRR 370.2).
- *Owner* - the person who owns any facility or part of a facility subject to regulation under Parts 370 through 374, and 376 of this title (6 NYCRR 370.2).
- *Owner or Operator* - the owner or operator of any facility or activity subject to regulation under Parts 370 through 374, and 376 of this title (6 NYCRR 370.2).
- *PCB Article* - any manufactured article, other than a PCB container, that contains PCBs and whose surface(s) has been in direct contact with PCBs. PCB article includes capacitors, transformers, electric motors, circuit breakers, reclosers, voltage regulators, switches (including sectionalizers and motor starters), electromagnets, cable, hydraulic machines, pumps, pipes, and any other manufactured item which is formed to a specific shape or design during manufacture, has end use function(s) dependent in whole or in part upon its shape or design during end use, and has either no change of chemical composition during its end use or only those changes of composition which have no commercial purpose separate from that of the PCB Article (6 NYCRR 371.4(e)).
- *Permit* - an authorization, license, or equivalent control document issued by New York State Department of Environmental Conservation to implement the requirements of Part 373 of this title. Permit does not include interim status (section 373-1.3), or any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit (6 NYCRR 370.2).
- *Person* - an individual, trust, firm, joint- stock company, corporation (including a government corporation), partnership, association, state, Federal government and any agency thereof, municipality, commission, political subdivision of a state, or any interstate body (6 NYCRR 370.2).
- *Personnel or Facility Personnel* - all persons who work at or oversee the operations of a hazardous waste facility, and whose actions or failure to act may result in noncompliance with the requirements of Part 373 of this title (6 NYCRR 370.2).
- *Regional Administrator* - the regional administrator of the appropriate regional office of the Environmental Protection Agency or the Regional Administrator's designee (6 NYCRR 370.2).
- *Regional Permit Administrator* - an employee of the department located in each of the nine regional offices of the department and designated by the commissioner to act on the commissioner's behalf in carrying out Part 621 of this title. Regional permit administrators' addresses and the counties under their jurisdiction can be found in Appendix 1 of this title (6 NYCRR 370.2).
- *Remediation Waste* - all solid and hazardous waste, and all media (including groundwater, surface water, soils, and sediments) and debris, which contain listed hazardous wastes or which themselves exhibit a hazardous waste characteristic, that are managed for the purpose of implementing corrective action under section 373-2.6(l) of this title and RCRA section 3008(h) and ECL 71-2727(3). For a given facility, remediation wastes may originate only from within the facility boundary, but may include waste managed in implementing section 373-2.6 of this title or ECL 27-0911, 71-2727(3) or RCRA section 3008(h) for releases beyond the facility boundary (6 NYCRR 370.2).

- *Small Capacitor* - a capacitor which contains less than 1.36 kg (3 lb) of dielectric fluid. The following assumptions may be used if the actual weight of the dielectric fluid is unknown. A capacitor whose total volume is less than 1639 m<sup>3</sup> (100 in.<sup>3</sup>) may be considered to contain less than 1.36 kg (3 lb) of dielectric fluid and a capacitor whose total volume is more than 3278 m<sup>3</sup> (200 in.<sup>3</sup>) must be considered to contain more than 1.36 kg (3 lb) of dielectric fluid. A capacitor whose volume is between 1639 and 3278 m<sup>3</sup> may be considered to contain less than 1.36 kg (3 lb) of dielectric fluid if the total weight of the capacitor is less than 4.08 kg (9 lb) (6 NYCRR 371.4(e)).
- *Sole Source Aquifer* - an aquifer system that the USEPA, pursuant to the Safe Drinking Water Act, 42 USC 300h-3(e), (see section 370.1(e) of this part), has determined to be the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health. The following have been designated sole source aquifers:
  1. The Clinton Street-Ballpark Valley Aquifer System includes the entire municipalities of Vestal, Johnson City, Endicott, Nichols, Waverly, and Owego, New York. Its recharge zone is considered to be one and the same with this area. The streamflow source zone is that portion of the Susquehanna River drainage basin composing the upstream headwaters area for the Broome and Tioga County area.
  2. The Long Island Aquifer System includes the entire counties of Kings, Queens, Nassau, and Suffolk, New York.
  3. The Schenectady/Niskayuna Aquifer System includes the entire municipalities of Ballston, Burnt Hills, Charlton, Glenville, Niskayuna, Rexford, Rotterdam, Schenectady, and Scotia, New York (6 NYCRR 370.2).
- *Vehicle* - any device or contrivance which is required by law to be registered with a state, province or the Federal government for conveyance over public roads and which actually contains or carries a regulated waste, for example, in the case of a tractor-trailer combination, the roll-off container or other removable containment device, it is the mobile flatbed or the undercarriage that is considered to be the vehicle (6 NYCRR 364.1).

**HAZARDOUS WASTE MANAGEMENT  
GUIDANCE FOR NEW YORK CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

This list of checklist items represents the requirements for hazardous waste management in New York that are substantially different than the hazardous waste requirements in the U. S. TEAM Guide.

|   |                                   |
|---|-----------------------------------|
| Missing Checklist Items   | HW.2.1.NY.                        |
| State-Specific Hazardous Waste Requirements   |                                   |
| General   | [Moved]                           |
| Hazardous Waste Turn-in/Collection Point  | HW.7.1.NY. through HW.7.17.NY.    |
| All Sizes of Generators   | HW.10.1.NY.                       |
| Small Quantity Generators (SQG)   | HW.40.1.NY.                       |
| Generators  | HW.55.1.NY. through HW.55.5.NY.   |
| Transportation of Hazardous Waste   | HW.100.1.NY. through HW.100.4.NY. |
| All TSDFs   |                                   |
| General   | HW.105.1.NY.                      |
| Documentation Requirements  | HW.145.1.NY. through HW.145.5.NY. |
| Universal Waste   |                                   |
| New York includes batteries, pesticides, thermostats, and lamps under Universal Waste regulations. See HW.7.3.NY. for state requirements covering fluorescent lighting lamps. |                                   |

**GUIDANCE FOR APPENDIX USERS**

**REFER TO APPENDIX NUMBERS:**

**REFER TO APPENDIX TITLES:**

4-1

PCB Hazardous Waste Numbers

| <b>COMPLIANCE CATEGORY:</b><br><b>HAZARDOUS WASTE MANAGEMENT</b><br><b>New York Supplement</b>  |   |
|---|---|
| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <b>HW.2.</b><br><br><b>MISSING CHECKLIST ITEMS</b><br><br><b>HW.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <b>STATE-SPECIFIC<br/>HAZARDOUS WASTE<br/>REQUIREMENTS</b><br><br><b>HW.5.<br/>General</b><br><br><b>HW.5.1.NY.</b> [Moved March 2004].<br><br><b>HW.5.2.NY.</b> [Deleted March 2004].<br><br><b>HW.5.3.NY.</b> [Deleted March 2004].<br><br><b>HW.5.4.NY.</b> [Deleted March 2004].<br><br><b>HW.5.5.NY.</b> [Deleted March 2004].<br><br><b>HW.5.6.NY.</b> [Deleted March 2004].<br><br><b>HW.5.7.NY.</b> [Deleted March 2004].<br><br><b>HW.5.8.NY.</b> [Deleted March 2004]. | <br><br><br>(NOTE: Moved to HW.7.1.NY. to accommodate reorganization of HW.5.)<br><br>(NOTE: Moved to HW.7.2.NY. to accommodate reorganization of HW.5.)<br><br>(NOTE: Moved to HW.7.3.NY. to accommodate reorganization of HW.5.)<br><br>(NOTE: Moved to HW.7.4.NY. to accommodate reorganization of HW.5.)<br><br>(NOTE: Moved to HW.7.5.NY. to accommodate reorganization of HW.5.)<br><br>(NOTE: Moved to HW.7.6.NY. to accommodate reorganization of HW.5.)<br><br>(NOTE: Moved to HW.7.7.NY. to accommodate reorganization of HW.5.)<br><br>(NOTE: Moved to HW.7.8.NY. to accommodate reorganization of HW.5.) |

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| <b>REGULATORY REQUIREMENTS:</b>  |  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>                        |
| <b>HW.5.9.NY.</b> [Deleted March 2004].  |  | (NOTE: Moved to HW.7.9.NY. to accommodate reorganization of HW.5.)  |
| <b>HW.5.10.NY.</b> [Deleted March 2004].   |  | (NOTE: Moved to HW.7.10.NY. to accommodate reorganization of HW.5.) |
| <b>HW.5.11.NY.</b> [Deleted March 2004].   |  | (NOTE: Moved to HW.7.11.NY. to accommodate reorganization of HW.5.) |
| <b>HW.5.12.NY.</b> [Deleted March 2004].   |  | (NOTE: Moved to HW.7.12.NY. to accommodate reorganization of HW.5.) |
| <b>HW.5.13.NY.</b> [Deleted March 2004].   |  | (NOTE: Moved to HW.7.13.NY. to accommodate reorganization of HW.5.) |
| <b>HW.5.14.NY.</b> [Deleted March 2004].   |  | (NOTE: Moved to HW.7.14.NY. to accommodate reorganization of HW.5.) |
| <b>HW.5.15.NY.</b> [Deleted March 2004].   |  | (NOTE: Moved to HW.7.15.NY. to accommodate reorganization of HW.5.) |
| <b>HW.5.16.NY.</b> [Deleted March 2004].   |  | (NOTE: Moved to HW.7.16.NY. to accommodate reorganization of HW.5.) |
| <b>HW.5.17.NY.</b> [Deleted March 2004].   |  | (NOTE: Moved to HW.7.17.NY. to accommodate reorganization of HW.5.) |



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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p>disposal of fluorescent lighting lamps must meet specific requirements (6 NYCRR 373-4.1 (d)(3)) [Revised March 2003].</p> <p><b>HW.7.4.NY.</b> The transportation of hazardous wastes collected from CESQGs and households must meet specific requirements (6 NYCRR 373-4.2 (c) through (f)).</p> | <p>Universal Waste.</p> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> <p>Verify that all wastes are transported by a permitted transporter, unless:</p> <ul style="list-style-type: none"> <li>- they are solely household wastes that are transported to an approved recycling facility</li> <li>- they are solely household hazardous wastes that are transported up to 50 mi by the program sponsor to: <ul style="list-style-type: none"> <li>- a collection site or facility owned or operated by the sponsor and in compliance with Subpart 373.4</li> <li>- a facility authorized to accept the hazardous waste or recycle it at an approved recycling facility.</li> </ul> </li> </ul> <p>Verify that all wastes are properly packaged to prevent reactions, spills, or leaks, and are labeled with the words, HOUSEHOLD HAZARDOUS WASTE or HAZARDOUS WASTE, as appropriate.</p> <p>Verify that no hazardous waste from CESQGs is mixed with any other such hazardous waste that has a different hazardous waste code or a different USDOT shipping description.</p> <p>(NOTE: Mixing refers only to physically pouring or blending the materials together so that they are no longer readily separable. Lab packing or other methods, used where intact containers of waste are placed together within a larger container for shipment, do not constitute mixing.)</p> <p>Verify that transportation of household hazardous waste from a collection or storage site is accompanied by shipping papers which meet the following requirements:</p> <ul style="list-style-type: none"> <li>- the identity of the program sponsor and date(s) of collection</li> <li>- the volume, waste type, hazard class, and destination of the waste is listed on the shipping document</li> <li>- shipping papers or manifests which contain waste solely of household origin are clearly marked HOUSEHOLD HAZARDOUS WASTE</li> <li>- copies of these forms are provided to the Department at an address designated by the Commissioner within 10 business days after the shipment leaves the collection site</li> <li>- permitted facilities provide shipping papers to the Department on a quarterly basis.</li> </ul> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> |



**COMPLIANCE CATEGORY:  
HAZARDOUS WASTE MANAGEMENT  
New York Supplement**

| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
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| <p><b>HW.7.5.NY.</b> Household hazardous waste collection days must meet specific requirements (6 NYCRR 373-4.3).</p>       | <p>(NOTE: The initial site used for a program to collect household hazardous waste on a not-for-profit basis is exempt from the permitting requirements (373-4.4) if the requirements in this checklist item are met.)</p> <p>Verify that the sponsoring organization submits a detailed collection program plan at least 60 days before the date of the event and receives written approval from the regional director of the department's region where the collection will take place.</p> <p>Verify that the plan contains, at a minimum, the following:</p> <ul style="list-style-type: none"> <li>- measures to be taken to ensure that all such waste comes from households or CESQGs</li> <li>- a specific waste determination, segregation, and packaging plan</li> <li>- the identification and qualifications of individuals who will be present during collection hours to segregate wastes based on their chemical and physical properties and to properly package and prepare the waste for shipment</li> <li>- a spill prevention and control plan</li> <li>- a site-specific emergency contingency plan</li> <li>- a site security plan, including additional precautions to be taken if wastes are to be stored overnight</li> <li>- identification of any facility that will receive the waste for storage, recycling, treatment, or disposal.</li> </ul> <p>Verify that all wastes are removed from the site within 3 days of collection, and the site is returned to its original condition</p> <p>Verify that wastes are packaged, labeled, and shipped in accordance with the requirements of HW.5.5.NY (Section 373-4.2).</p> <p>Verify that the program sponsor reports the results of the program to the Department on forms supplied by the department within 10 business days after the collection.</p> <p>Verify that the site is not used more than 3 consecutive days or 30 days per calendar year.</p> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> |
| <p><b>HW.7.6.NY.</b> Household hazardous waste storage facilities must meet specific requirements (6 NYCRR 373-4.4(a)).</p> | <p>(NOTE: Household hazardous waste collection and storage facilities refer to facilities that collected hazardous waste from households and CESQGs. HW.5.6.NY. through HW.5.16.NY apply to hazardous waste collection and storage facilities.)</p> <p>Verify that any site or facility used to collect and/or store household hazardous waste for more than 3 consecutive days, or for more than 30 days within a calendar year, has a permit.</p> <p>Verify that the engineering report for an initial permit to construct and operate a</p>  |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <b>HW.7.7.NY.</b> Household hazardous waste storage facilities must meet packaging and storage requirements (6 NYCRR 373-4.4 (b)(1)(i) through (iv), (vi), and (vii), and (b)(2) and (3)). | <p>household hazardous waste collection and storage facility contains a description of the operation, a site plan, and a waste control plan.</p> <p>Verify that the description of the operation of the facility, including but not limited to:</p> <ul style="list-style-type: none"> <li>- days and hours of operation</li> <li>- identification of the owner/operator</li> <li>- persons who will be allowed to use the facility, fees to be charged, and whether the facility will be run on an appointment or open basis</li> <li>- a projection of the expected volume by type of waste to be received at the facility</li> <li>- registration forms which will be used to register participating households and CESQGs.</li> </ul> <p>Verify that the site plans include:</p> <ul style="list-style-type: none"> <li>- general site layout, including traffic flow on and adjacent to the property and current land use along property borders</li> <li>- identification of waste handling and storage areas, locating the specific waste types which would be managed in each area</li> <li>- location of all emergency and spill cleanup equipment.</li> </ul> <p>Verify that the waste control plan identifies measures that will be taken to identify ineligible generators and unacceptable waste types, and actions that will be taken if these materials are brought to the facility.</p> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> |
|  | <p>Verify that, if a container holding household hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the waste is transferred to an undamaged container or managed in some other way that complies with the requirements for packaging and storage.</p> <p>Verify that containers are made of or lined with materials that will not react with, and are otherwise compatible with, the household hazardous waste to be stored so that the ability of the container to contain the waste is not impaired.</p> <p>Verify that a container holding household hazardous waste is always closed during storage, except when it is necessary to add or remove waste.</p> <p>Verify that a container holding household hazardous waste is not to be opened, handled, or stored in a manner that may rupture the container or cause it to leak.</p> <p>Verify that a container holding household hazardous waste is marked with words identifying its contents and with the date waste is first placed into the container.</p> <p>Verify that, at least weekly, areas in which containers are stored are inspected,</p>  |

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| <p><b>HW.7.8.NY.</b> Household hazardous waste storage facilities must meet requirements for ignitable and reactive wastes (6 NYCRR 373-4.4 (b)(1)(vi) and (vii) and (b)(4)).</p> | <p>looking for leaking containers and for deterioration of containers or the containment system caused by corrosion or other factors.</p> <p>Verify that storage of household hazardous waste in tanks is managed in accordance with the requirements for hazardous waste tanks (Subpart 360-6) and at no time are incompatible or reactive wastes placed in the tank.</p> <p>Verify that waste storage does not exceed a period of 180 days, provided that the storage capacity of the facility is not exceeded.</p> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> <p>Verify that containers holding ignitable or reactive waste are located at least 15 m (50 ft) from the facility's property line.</p> <p>Verify that incompatible wastes, or incompatible wastes and materials are not placed in the same container.</p> <p>Verify that waste is not placed in an unwashed container that previously held an incompatible waste or material.</p> <p>Verify that a storage container holding a waste which is incompatible with any waste or other material stored nearby in other containers is separated from other materials or protected from them by means of a dike, berm, wall, or other device.</p> <p>Verify that precautions are taken to prevent accidental ignition or reaction of ignitable or reactive waste.</p> <p>Verify that ignitable or reactive waste is separated and protected from sources of ignition or reaction including, but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat.</p> <p>Verify that, while ignitable or reactive waste is being handled, smoking and open flames are confined to specifically designated locations.</p> <p>Verify that NO SMOKING signs are conspicuously placed wherever there is a hazard from ignitable or reactive waste.</p> <p>Verify that at no time are reactive or incompatible wastes mixed.</p> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> |
| <p><b>HW.7.9.NY.</b> Household hazardous waste storage</p>  | <p>Verify that container storage areas, other than containers that do not contain free</p>   |

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| <p>facilities must meet containment system requirements (6 NYCRR 373-4.4 (b)(1)(v)).</p> <p><b>HW.7.10.NY.</b> Household hazardous waste storage facilities must meet security plan requirements (6 NYCRR 373-4.4 (c)).</p> | <p>liquid, have a containment system.</p> <p>Verify that the containment system has a base underlying the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.</p> <p>Verify that the containment system base is sloped or the containment system is otherwise designed and operated to drain and remove liquid resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids.</p> <p>Verify that the containment systems have sufficient capacity to contain 10 percent of the volume of containers or the volume of the largest container, whichever is greater.</p> <p>(NOTE: Containers that do not contain free liquids need not be considered in this determination of capacity.)</p> <p>Verify that run-on into the containment system is prevented unless the collection system has sufficient excess capacity, in addition to that required above, to contain any run-on which might enter the system.</p> <p>Verify that spilled or leaked waste and accumulated precipitation is removed from the sump or collection area in a timely manner as is necessary to prevent overflow of the collection system.</p> <p>Verify that storage areas that store containers holding only wastes that do not contain free liquids meets one of the following requirements:</p> <ul style="list-style-type: none"> <li>- the storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation</li> <li>- the containers are elevated or are otherwise protected from contact with accumulated liquid.</li> </ul> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> <p>Verify that the facility has one of the following:</p> <ul style="list-style-type: none"> <li>- a 24-h surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the active portion of the facility</li> <li>- an artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff), which completely surrounds the active portion of the facility and a means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility).</li> </ul> <p>Verify that a sign with the legend DANGER--UNAUTHORIZED PERSONNEL KEEP OUT is posted at each entrance to the active portion of the facility, and at</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>HW.7.11.NY.</b> Household hazardous waste storage facilities must meet inspection requirements (6 NYCRR 373-4.4 (d)).</p> | <p>other locations in sufficient numbers to be seen from any approach to the active portion.</p> <p>Verify that the legend is written in English and legible from a distance of at least 25 ft.</p> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> <p>Verify that a written schedule is followed for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, and responding to environmental or human health hazards.</p> <p>Verify that the inspection schedule is kept at the facility, available for inspection by authorized Department personnel.</p> <p>Verify that the inspection schedule identifies the types of problems (e.g., malfunctions or deterioration) that are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).</p> <p>Verify that the frequency of inspection is based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction of any operator error goes undetected between inspections.</p> <p>Verify that areas subject to spills, such as loading and unloading areas, are inspected daily when in use.</p> <p>Verify that any deterioration or malfunction of equipment or structures which the inspection reveals is remedied on a schedule which ensures that the problem does not lead to an environmental or human health hazard.</p> <p>Verify that, when a hazard is imminent or has already occurred, remedial action is taken immediately.</p> <p>Verify that inspections are recorded in an inspection log or summary.</p> <p>Verify that inspection records are kept for at least 3 yr from the date of inspection.</p> <p>Verify that, at a minimum, the inspection records include the following:</p> <ul style="list-style-type: none"> <li>- date and time of the inspection</li> <li>- the name of the inspector</li> <li>- a notation of the observations made</li> <li>- the date and nature of any repairs or other remedial actions.</li> </ul> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>HW.7.12.NY.</b> Household hazardous waste storage facilities must meet recordkeeping and reporting requirements (6 NYCRR 373-4.4 (e)).</p> | <p>Verify that, for each container into which other containers of household hazardous waste are placed, a log is used which contains the following information:</p> <ul style="list-style-type: none"> <li>- beginning date of accumulation</li> <li>- each individual waste container within the container, its contents, volume, and date received</li> <li>- the date container became full</li> </ul> <p>Verify that, for each container into which consolidated household hazardous waste is placed, a log sheet is used which contains the following information:</p> <ul style="list-style-type: none"> <li>- beginning date of accumulation</li> <li>- date material was entered and type of material</li> <li>- the date container became full.</li> </ul> <p>Verify that an overall waste log is maintained which lists each container stored on site and includes waste type, hazard class, beginning and ending accumulation dates, and location of each.</p> <p>Verify that copies of container logs are retained for a period of 3 yr after waste shipment.</p> <p>Verify that copies of shipping papers or manifests are provided to the Department and are retained for a period of 3 yr after shipment.</p> <p>Verify that, annually (by 1 February for the preceding calendar year) a listing of all farmers and CESQGs who delivered waste to the facility is submitted to the Department.</p> <p>Verify that the annual listing includes each generator's name, address, phone number, date waste was received, quantity received, and waste type.</p> <p>Verify that, annually (by 1 February for the preceding calendar year), a year-end report is submitted to the Department which contains a summary of the facility's operations, including, at a minimum:</p> <ul style="list-style-type: none"> <li>- number of household participants</li> <li>- operation, transportation and disposal costs</li> <li>- a summary of each incident which required implementation of the contingency plan</li> <li>- total volume of household hazardous waste collected and volume and disposition of any collected materials not included in the reporting requirements for manifests and shipping papers this subdivision (e.g., usable or reusable products)</li> <li>- any changes in hours of operation or other aspects of the facility.</li> </ul> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>   |
| <p><b>HW.7.13.NY.</b> Household hazardous waste storage facilities must meet preparedness and prevention requirements (6 NYCRR 373-4.4 (f)).</p> | <p>Verify that facilities are designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or nonsudden release of waste or hazardous constituents to air, soil, or surface water which could threaten human health or the environment.</p> <p>Verify that all facilities are equipped with the following:</p> <ul style="list-style-type: none"> <li>- an internal communication or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel</li> <li>- a device, such as a telephone (immediately available at the scene of operations) or a hand-held, two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams</li> <li>- portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment</li> <li>- water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinkler, or water spray systems.</li> </ul> <p>Verify that all facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, are tested and maintained as necessary to assure its proper operation in time of emergency.</p> <p>Verify that, whenever household hazardous waste is being collected, poured, mixed or otherwise handled, all personnel involved in the operation have immediate access to an internal alarm or emergency communication device either directly or through visual or voice contact with another employee.</p> <p>Verify that, if there is ever just one employee on the premises while the facility is operating, this employee has immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held, two-way radio, capable of summoning external emergency assistance.</p> <p>Verify that aisle space is maintained to allow the unobstructed movement of personnel, fire protection equipment, and decontamination equipment to any area of facility operation in an emergency.</p> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> |
| <p><b>HW.7.14.NY.</b> Household hazardous waste storage facilities must meet requirements for a contingency plan (6 NYCRR</p>                    | <p>Verify that the contingency plan is designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or nonsudden release of waste or hazardous constituents to air, soil, or surface water.</p> <p>Verify that the provisions of the plan are carried out immediately whenever there is a fire, explosion, or release of waste or hazardous constituents that could</p>   |





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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>HW.7.16.NY.</b> Household hazardous waste storage facilities must meet requirements for closure (6 NYCRR 373-4.4 (i)).</p> | <p>Verify that personnel successfully complete the training program within 6 mo after the date of their employment or assignment to the facility, whichever is later.</p> <p>Verify that employees do not work in unsupervised positions until they have completed the training requirements.</p> <p>Verify that facility personnel take part in an annual review of the initial training.</p> <p>Verify that the following training documents and records are maintained at the facility:</p> <ul style="list-style-type: none"> <li>- the job title for each position at the facility related to household hazardous waste management, and the name of the employee filling each job</li> <li>- a written job description for each position consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but include the requisite skill, education or other qualifications, and duties of employees assigned to each position</li> <li>- a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position</li> <li>- records that document the required training has been given to, and completed by, facility personnel.</li> </ul> <p>Verify that training records on current personnel are kept until closure of the facility.</p> <p>Verify that training records on former employees are kept for at least 3 yr from the date the employee last worked at the facility.</p> <p>(NOTE: Personnel training records may accompany personnel transferred within the same organization.)</p> <p>(NOTE: The permit application must contain an outline of the training program to be used at the facility and a brief description of how the training program is designed to meet actual job tasks.)</p> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> <p>Verify that the household hazardous waste facility has a written closure plan which was submitted with the permit application.</p> <p>Verify that closure activities are completed in accordance with the approved closure plan within 180 days after waste is last accepted at the facility.</p> <p>Verify that the closure plan is amended whenever changes in the operation of the facility affect the closure plan.</p> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>   |
| <b>HW.7.17.NY.</b> Mobile household hazardous waste collection facilities must meet specific requirements (6 NYCRR 373-4.5). | <p>(NOTE: See HW.7.1.NY. for applicability.)</p> <p>(NOTE: Any household hazardous waste collection program that is required to obtain a permit and which, through the use of trailers, tents, and/or temporary or permanent structures, operates at a series of sites during a calendar year, may obtain a single permit for the program.)</p> <p>Verify that any required information which is site-specific, including but not limited to the site plan and some elements of the contingency plan and security plan, are included in the permit application separately for each site that will be used.</p> <p>Verify that a schedule is provided at least yearly to the Department that lists the dates and hours of operation at each location.</p> <p>Verify that the Department is notified of additions or modifications to the schedule at least 60 days in advance.</p> <p>Verify that only one site is operated under a single permit on any single day.</p> <p>Verify that additional sites are approved through a permit modification.</p> <p>(NOTE: See HW.7.1.NY. for applicability.)</p> |

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| <b>HW.10.</b><br><br><b>ALL SIZES OF GENERATORS</b><br><br><b>HW.10.1.NY.</b> Generators of PCB waste must manage that waste as hazardous waste (6 NYCRR 371.4 (e)). | Verify that generators of PCB wastes identified in Appendix 4-1 manage that waste as hazardous waste and use the DEC Hazardous waste numbers assigned to each category. |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>HW.40.</b></p> <p><b>SMALL QUANTITY<br/>GENERATORS (SQGs)</b></p> <p><b>HW.40.1.NY.</b> SQGs who accumulate more than 185 gal of liquid hazardous waste or any liquid hazardous waste in a UST in specific counties or over specific aquifers must meet specific requirements (6 NYCRR 373-1.1 (d)(1)(iv)([g])).</p> | <p>(NOTE: This is repeated in ST.100.1.NY.)</p> <p>(NOTE: These requirements apply to storage in containers or tanks of liquid hazardous waste that is generated onsite in the Counties of Kings, Nassau, Queens, and Suffolk, or over the Schenectady/Niskayuna Aquifer System in Schenectady, Saratoga, and Albany Counties or the Clinton Street--Ball Park Valley Aquifer System in Broome and Tioga Counties.)</p> <p>(NOTE: Recyclable materials and characteristic hazardous wastes stored prior to recycling are excluded from these limitations.)</p> <p>Verify that, for container storage exceeding 185 gal of liquid hazardous waste, the containment system is designed and operated in accordance with the following:</p> <ul style="list-style-type: none"> <li>- a base underlies the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed</li> <li>- the base is sloped or the containment system is otherwise designed and operated to drain and remove liquid resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids</li> <li>- the containment system has sufficient capacity to contain 10 percent of the volume of containers or the volume of the largest container, whichever is greater</li> </ul> <p>(NOTE: Containers that do not contain free liquids need not be considered in this determination.)</p> <ul style="list-style-type: none"> <li>- run-on into the containment system is prevented unless the collection system has sufficient excess capacity in addition to that required above to contain any run-on which might enter the system</li> <li>- spilled or leaked waste and accumulated precipitation is removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system.)</li> </ul> <p>Verify that, for tanks storing any amount of liquid hazardous waste, the secondary containment system is designed and constructed in accordance with the requirements for hazardous waste storage tanks.</p> <p>Verify that the storage of hazardous waste complies with the requirements of subparagraphs 372.2(a)(8)(iii) through (v) (i.e. equivalent of Federal requirements for 180-day accumulation time limit (270-days if transportation is required of over 200 mi) emergency coordinator, and emergency information posted by the phone).</p> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>   |
|  | (NOTE: By 22 December 1998, existing tank or container storage units, not subject to secondary containment requirements prior to the effective date of these regulations [17 December 1995], must be in compliance with these requirements.) |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>HW.55.</b></p> <p><b>GENERATORS</b></p> <p><b>HW.55.1.NY.</b> Hazardous waste may be stored in containers or tanks for a period not exceeding 90 days without a permit or interim status when specific requirements are met (6 NYCRR 373-1.1(d)(1)(iii)) [Revised March 2003].</p> | <p>(NOTE: This is repeated in ST.105.1.NY.)</p> <p>(NOTE: The storage of liquid hazardous wastes in the Counties of Kings, Nassau, Queens, and Suffolk, or over the Schenectady/Niskayuna Aquifer System in Schenectady, Saratoga, and Albany Counties and the Clinton Street-Ball Park Valley Aquifer System in Broome and Tioga Counties must meet more stringent management requirements. See HW.40.1.NY. for Small Quantity Generators requirements and HW.55.3.NY. for Generator requirements.)</p> <p>Verify that the storage period is 90 days or less.</p> <p>Verify that, for storage of liquid hazardous waste in containers, the total amount of hazardous waste stored in containers in the storage areas at one time is 8800 gal or less.</p> <p>(NOTE: Waste stored in areas listed in the above note, waste treated onsite in the same containers or tanks, and characteristic hazardous wastes stored prior to recycling are excluded from the 8800 gal limitation.)</p> <p>Verify that the requirements (these are all the equivalent of the Federal requirements) for the management of containers (Section 373-3.9) or the requirements for the management of tanks (Section 373-3.10, except for section 373-3.10(h)(3) and (k)) are met.</p> <p>Verify that the date on which each period of accumulation begins is clearly marked and visible for inspection on each container.</p> <p>Verify that a label or sign stating HAZARDOUS WASTE identifies all areas, tanks, and containers used to accumulate hazardous waste.</p> <p>Verify that all tanks and containers are marked with other words to identify their contents.</p> <p>Verify that each container is properly labeled and marked.</p> <p>Verify that the generator complies with the requirements for personnel training in section 373-3.2, for preparedness and prevention in section 373-3.3, and contingency plans and emergency procedures in sections 373-3.4 and 376.1(g)(1)(iv) (these are all the equivalent of the Federal requirements).</p> <p>Verify that, if the amount of liquid hazardous waste stored in containers in these areas exceeds 8800 gal, the entire volume of liquid hazardous waste is stored within an area meeting the following secondary containment requirements:</p> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
|  | <ul style="list-style-type: none"> <li>- a base underlies the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed</li> <li>- the base is sloped or the containment system is otherwise designed and operated to drain and remove liquid resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids</li> <li>- the containment system has sufficient capacity to contain 10 percent of the volume of containers or the volume of the largest container, whichever is greater</li> </ul> <p>(NOTE: Containers that do not contain free liquids need not be considered in this determination.)</p> <ul style="list-style-type: none"> <li>- run-on into the containment system is prevented unless the collection system has sufficient excess capacity in addition to that required above to contain any run-on which might enter the system</li> <li>- spilled or leaked waste and accumulated precipitation is removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system.</li> </ul> <p>(NOTE: An extension of up to 30 days may be granted at the discretion of the commissioner on a case-by-case basis.)</p> |
| <b>HW.55.2.NY.</b> [Deleted January 1998].   | (NOTE: Information in HW.55.2.NY. was redundant.)   |
| <b>HW.55.3.NY.</b> Liquid hazardous waste may be stored in containers or tanks in specific counties or over specific aquifers for a period of 90 days or less without a permit or interim status when specific requirements are met (6 NYCRR 373-1.1(d)(1)(iv) ([a]) through ([f])). | <p>(NOTE: These requirements apply to storage in containers or tanks of liquid hazardous waste that is generated onsite in the Counties of Kings, Nassau, Queens, and Suffolk, or over the Schenectady/Niskayuna Aquifer System in Schenectady, Saratoga, and Albany Counties or the Clinton Street--Ball Park Valley Aquifer System in Broome and Tioga Counties.)</p> <p>(NOTE: These requirements apply to any quantity of liquid hazardous waste stored onsite in tanks or to the total quantity of liquid hazardous waste stored onsite in containers that exceeds 185 gal.)</p> <p>Verify that the storage period is 90 days or less.</p> <p>(NOTE: Waste treated onsite in the same containers or tanks and characteristic hazardous wastes stored prior to recycling are excluded from the 185 gal limitation.)</p> <p>Verify that for container storage exceeding 185 gal, the containment system is designed and operated in accordance with the following:</p> <ul style="list-style-type: none"> <li>- a base underlies the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated</li> </ul>  |





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| <b>REGULATORY<br/>REQUIREMENTS:</b> | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
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|                                     | <p>the reporting year for shipments to a treatment, storage or disposal facility within the United States</p> <ul style="list-style-type: none"> <li>- a description, USEPA hazardous waste number (5) (from section 371.3 and/or 371.4 of this title), DOT hazardous class, and quantity of each hazardous waste shipped offsite for shipments to a TSDF within the United States (listed by USEPA identification number of each offsite facility to which waste was shipped</li> <li>- a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated</li> <li>- a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984</li> <li>- the certification signed by the generator or authorized representative.</li> </ul> <p>Verify that any generator who treats or disposes of hazardous waste onsite submit an annual report covering those wastes.</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>HW.100.</b></p> <p><b>TRANSPORTATION<br/>OF HAZARDOUS WASTE</b></p> <p><b>HW.100.1.NY.</b> Hazardous waste transporters must be permitted (6 NYCRR 364.2).</p> <p><b>HW.100.2.NY.</b> Hazardous waste transporters operating under permit must meet specific operational requirements (6 NYCRR 364.6 (a) through (d) and (f) through (h)) [Citation Revised March 2008].</p> | <p>Verify that a transporter has a permit for the following:</p> <ul style="list-style-type: none"> <li>- collection or removal of hazardous waste from its point of origin, generation, or occurrence</li> <li>- transportation of any hazardous waste</li> <li>- deliver any hazardous waste to a TSDF or otherwise dispose of or relinquish possession of any hazardous waste other than as specified in a permit.</li> </ul> <p>Verify that hazardous waste is not given for deliver or otherwise relinquished to a transporter without a valid transporter permit.</p> <p>(NOTE: Any generator is exempt from these transportation requirements who transports less than a total of 220 lb (100 kg) of hazardous waste or less than 2.2 lb (1 kg) of acute hazardous waste during a consecutive 30-day period, provided that the wastes are generated and transported exclusively by the generator (6 NYCRR 364.1((e)(3)).)</p> <p>Verify that the transporter carries the original permit or a legible photocopy of the permit in the vehicle.</p> <p>Verify that the permit, together with shipping or transporting documents relative to the waste being transported, is available to authorized representatives of the Department or to any law enforcement officers when requested.</p> <p>Verify that the full name of the transporter is displayed on both sides of each vehicle and the transporter's permit number, in figures at least 3 in. high and of a color which contrasts with the background, in a prominent position on each side and the rear of each vehicle covered by the permit.</p> <p>Verify that the vehicle operator remains with the permitted vehicle while it is being filled or discharged.</p> <p>Verify that all wastes are properly contained during transport so as to prevent leaking, blowing, or any other type of discharge into the environment.</p> <p>(NOTE: The permittee is responsible for all requirements (Federal and state) for all vehicles, including leased vehicles operated under his permit.)</p> <p>Verify that every permitted vehicle is conspicuously marked or placarded, in a manner consistent with section 14-f of the New York State Transportation Law and any related Federal requirements, related to the transportation of the</p> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>   |
| <p><b>HW.100.3.NY.</b> Hazardous waste transporters operating under permit must meet specific reporting and recordkeeping requirements (6 NYCRR 364.6(e)).</p> <p><b>HW.100.4.NY.</b> Hazardous waste containers must be marked in specific ways before being transported offsite (6 NYCRR 372.2(a)(6)) [Citation Revised March 2008].</p> | <p>hazardous waste and its principal hazard.</p> <p>Verify that permitted vehicles are restricted to the transportation of materials not intended for human or animal consumption or for other use by the general public except when properly cleaned in accordance with all applicable Federal and state regulations governing decontamination.</p> <p>(NOTE: Any generator is exempt from these transportation requirements who transports less than a total of 220 lb (100 kg) of hazardous waste or less than 2.2 lb (1 kg) of acute hazardous waste during a consecutive 30-day period, provided that the wastes are generated and transported exclusively by the generator (6 NYCRR 364.1((e)(3)).)</p> <p>Verify that a report is submitted to the Department annually, or more frequently if the Department deems necessary, on forms prescribed by the Department.</p> <p>Verify that the records on which the annual report is based are retained for 3 yr.</p> <p>Verify that these records are available, upon request, to the Department during normal business hours.</p> <p>Verify that any change of address, name, or location of garaged vehicles is submitted immediately to the Department.</p> <p>(NOTE: Permits are not transferable. Changes of ownership invalidate the provisions of transporter permits.)</p> <p>(NOTE: Any generator is exempt from these transportation requirements who transports less than a total of 220 lb (100 kg) of hazardous waste or less than 2.2 lb (1 kg) of acute hazardous waste during a consecutive 30-day period, provided that the wastes are generated and transported exclusively by the generator (6 NYCRR 364.1((e)(3)).)</p> <p>Verify that, before transporting or offering hazardous waste for transportation offsite, a generator meets the following requirements:</p> <ul style="list-style-type: none"> <li>- marks each package in accordance with the applicable U.S. Department of Transportation regulations (49 CFR part 172) (see 6 NYCRR 370.1(e))</li> <li>- marks each container of 110 gal or less as follows:<br/> “HAZARDOUS WASTE--Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the USEPA.”<br/> Generator's Name:<br/> Manifest Document Number:</li> </ul> <p>Verify that the markings meet the following requirements:</p> <ul style="list-style-type: none"> <li>- are durable, in English, and printed on or affixed to the surface of a package</li> </ul> |

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|  | <p>or on a label, tag or sign</p> <ul style="list-style-type: none"> <li>- are displayed on a background of sharply contrasting color</li> <li>- are unobscured by labels or attachments</li> <li>- are located away from any other marking (such as advertising) that could substantially reduce its effectiveness.</li> </ul> <p>(NOTE: Any generator is exempt from these transportation requirements who transports less than a total of 220 lb (100 kg) of hazardous waste or less than 2.2 lb (1 kg) of acute hazardous waste during a consecutive 30-day period, provided that the wastes are generated and transported exclusively by the generator (6 NYCRR 364.1((e)(3)).)</p> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>   |
| <p><b>ALL TSDFs</b></p> <p><b>HW.105. General</b></p> <p><b>HW.105.1.NY.</b> Hazardous waste management facilities must have a permit or operate under interim status (6 NYCRR 373-1.2 and 373-1.3).</p> | <p>Verify that physical construction or operation of a new hazardous waste facility is not started without a permit.</p> <p>Verify that a hazardous waste facility operating under interim status has submitted part A of the USEPA permit application form.</p> <p>Verify that the TSDF operates within the conditions of its permit or permit application.</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>ALL TSDFs</b></p> <p><b>HW.145.<br/>Documentation<br/>Requirements</b></p> <p><b>HW.145.1.NY.</b> TSDFs must submit an annual report (6 NYCRR 373-2.5(e) and 373-3.5(e)).</p> <p><b>HW.145.2.NY.</b> Specific conditions must be met before unmanifested waste shipments are accepted at a TSDF (6 NYCRR 372-2.5(b)(2) and 373-3.5(b)(2)).</p> | <p>Verify that an annual report, covering the pervious calendar year, is submitted to the Commissioner by 1 March of each year.</p> <p>Verify that the annual report includes the following, at a minimum:</p> <ul style="list-style-type: none"> <li>- the USEPA identification number, name and address of the facility</li> <li>- the calendar year covered by the report</li> <li>- for offsite TSDFs, the USEPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report gives the name and address of the foreign generator</li> <li>- a description and the quantity of each hazardous waste the facility received during the year (for offsite TSDFs, this information is listed by USEPA identification number of each generator</li> <li>- the method of treatment, storage or disposal for each hazardous waste</li> <li>- groundwater monitoring data , where required</li> <li>- the most recent closure cost estimate and the most recent postclosure cost estimate</li> <li>- for generators who treat, store, or dispose of hazardous waste onsite, a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated</li> <li>- for generators who treat, store or dispose of hazardous waste onsite, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984</li> <li>- the certification signed by the owner or operator of the facility or the owner or operator's authorized representative.</li> </ul> <p>Verify that unmanifested waste shipments meet one of the following conditions:</p> <ul style="list-style-type: none"> <li>- the waste shipment originated from a CESQG</li> <li>- the waste shipment is transported in whole or in part by a rail or water (bulk) transporter and the requirements of section 372.7 of this title are satisfied</li> <li>- the facility is an alternate facility and the generator of the wastes has confirmed this arrangement.</li> </ul> <p>Verify that an unmanifested waste shipment (other than those listed above) is accepted only after a communication from the appropriate regional office of the Department and authorization from that office to accept the waste ad an</p> |

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| <p><b>HW.145.3.NY.</b> TSDFs must distribute copies of the manifest within 2 business days (6 NYCRR 373-2.5 (b)(1)([b])(iv) and 373-3.5(b)(1)([b])(iv)).</p> <p><b>HW.145.4.NY.</b> TSDFs must make report quarterly summaries of (6 NYCRR 373-2.5 (b)(1)([b])(viii)([3]) and 373-3.5 (b)(1)([b])(viii)([3])).</p> <p><b>HW.145.5.NY.</b> The Department may request TSDF records (6 NYCRR 373-2.5(b)(3)(iii) ([b]) and 373-3.5(b)(3)(iii)([b])).</p> | <p>unmanifested report is filed.</p> <p>Verify that an unmanifested waste report is filed with the Department within 2 days if the shipment was transported in whole or in part by a rail or water (bulk) transporter and the manifest is not received by the facility within 7 days of receipt of the shipment.</p> <p>Verify that, after the TSDF certifies receipt of the shipment, the copies of the manifest are distributed according to the instructions with the manifest form, postmarked within 2 days of receipt of the shipment.</p> <p>Verify that reports of quarterly manifest summaries are submitted to the Department.</p> <p>Verify that the summaries include the waste types and quantities received from each generator.</p> <p>Verify that all required records are furnished to the Department (postmarked within 5 business days) upon written request.</p> <p>Verify that required records are made available at all reasonable times for inspection by any officer, employee, or representative of the Department.</p> |

## Appendix 4-1

### PCB Hazardous Waste Numbers

(Source: 6 NYCRR 371.4(e))

Wastes containing polychlorinated biphenyls (PCBs):

1. All solid wastes containing 50 ppm by weight (on a dry weight basis for other than liquid wastes) or greater of polychlorinated biphenyls (PCBs) are listed hazardous wastes, excluding small capacitors as defined in paragraph (3) of this subdivision and PCB Articles drained in accordance with subparagraphs (2)(ii) and (iii) of this subdivision. PCB Articles that contain less than 50 ppm PCBs are not regulated as hazardous waste. Oils in or from electrical equipment whose PCB concentration is unknown, except circuit breakers, reclosers, and cable, must be assumed to contain between 50 and 500 ppm PCB and are listed hazardous waste. "PCB" and "PCBs" mean any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees. Any chemical waste, combination of waste, or environmental media that contains less than 50 ppm PCBs are listed hazardous waste only as specifically provided in paragraph (2) of this subdivision. Wastes that may contain PCBs include dielectric fluids, contaminated solvents, waste oil, heat transfer fluids, hydraulic fluids, dredge spoils, and material contaminated as a result of spills. The hazardous code for these PCB wastes shall be Toxic Waste (T). These wastes shall have Hazardous Waste Numbers assigned as follows:

- B001 PCB Oil (concentrated) from transformers, capacitors, etc.
- B002 Petroleum oil or other liquid containing 50ppm or greater of PCBs, but less than 500 ppm PCBs. This includes oil from electrical equipment whose PCB concentration is unknown, except for circuit breakers, reclosers and cable.
- B003 Petroleum oil or other liquid containing 500 ppm or greater of PCBs.
- B004 PCB Articles containing 50 ppm or greater of PCBs, but less than 500 ppm PCBs, excluding small capacitors. This includes oil-filled electrical equipment whose PCB concentration is unknown, except for circuit breakers, reclosers, and cable.
- B005 PCB articles, other than transformers, that contain 500 ppm or greater of PCBs, excluding small capacitors.
- B006 PCB transformers. "PCB Transformers" means any transformer that contains 500 ppm PCB or greater.
- B007 Other PCB Wastes including contaminated soil, solids, sludges, clothing, rags, and dredge material.

(NOTE: PCBs are also regulated by 40 CFR Part 761. A person must comply with both this part and 40 CFR Part 761 (see section 370.1(e) of this title).

#### 2. Drained PCB articles.

a. Except as provided in subparagraphs (ii) and (iii) of this paragraph, drained PCB Articles containing at least 50 ppm PCBs are regulated as hazardous waste. (ii) PCB articles, except capacitors, that contain between 50 and 500 ppm PCB, are no longer regulated as PCB listed hazardous waste provided that all free-flowing liquid has been drained from the article. The drained liquid is a listed hazardous waste, as is any solvent used for flushing (iii)([a]). Hydraulic machines containing less than 1,000 ppm PCB are no longer regulated as PCB listed hazardous waste, provided that all free-flowing liquid has been drained from the hydraulic machine. The drained liquid is a listed hazardous waste, as is any solvent used for flushing.

b. Hydraulic machines containing 1,000 ppm PCB or greater are no longer regulated as PCB listed hazardous waste, provided that all free-flowing liquid has been drained from the hydraulic machine, and the drained hydraulic machine is flushed with a solvent in which PCBs are readily soluble. The solvent to be used for flushing must contain less than 50 ppm PCB. The drained liquid and the solvent used for flushing are listed hazardous wastes.



## SECTION 5

### NATURAL RESOURCES MANAGEMENT

#### New York Supplement, March 2010

This section covers the state requirements for Natural Resources Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Adjacent Area* - (6 NYCRR 661.4):
  1. any land immediately adjacent to a tidal wetland within whichever of the following limits is closest to the most landward tidal wetland boundary, as such most landward tidal wetlands boundary is shown on an inventory map:
    - a. 300 ft landward of said most landward boundary of a tidal wetland, provided, however, that within the boundaries of the City of New York this distance shall be 150 ft
    - b. to the seaward edge of the closest lawfully and presently existing (i.e., as of 20 August 1977), functional and substantial fabricated (including, but not limited to, paved streets and highways, railroads, bulkheads and sea walls, and rip-rap walls) which lies generally parallel to said most tidal wetland landward boundary and which is a minimum of 100 ft in length as measured generally parallel to such most landward boundary, but not including individual buildings
    - c. in the elevation contour of 10 ft above mean sea level, except when such contour crosses the seaward face of a bluff or cliff, or crosses a hill on which the slope equals or exceeds the natural angle of repose of the soil, then to the topographic crest of such bluff, cliff, or hill. Pending the determination by the Commissioner in a particular case, the most recent, as of 21 July 1992, topographical maps published by the United States Geological Survey, Department of the Interior, having a scale of 1:24,000 shall be rebuttable presumptive evidence of such 10 ft elevation.
  2. Adjacent area shall not include any area laying landward of an imaginary line drawn between the seaward edges of two existing (i.e., as of 20 August 1977) substantial fabricated structures which constitute the landward limit of an adjacent area where the area landward of such imaginary line does not have located thereon any such fabricated structures and where such imaginary line is less than 100 ft in length, as measured generally parallel to the most landward limit of the tidal wetland involved.
  3. Where land lies within the boundaries of an adjacent area but appears to be excluded from an adjacent area, such land shall be deemed to be part of an adjacent area. Provided, however, that in such instances of overlap between the various provisions the regional permit administrator may in his discretion determine that said land is not an adjacent area if factors are present which in his opinion justify treating such land as nonadjacent area.
- *Aquaculture* - the cultivation and harvesting of products that naturally are produced in the marine environment, including fish, shellfish, crustaceans, and seaweed, and the installation of cribs, racks, and in-water structures for cultivating such products, but shall not mean the construction of any building, any filling or dredging, or the construction of any water-regulating structures (6 NYCRR 661.4).
- *Banks* - that land area immediately adjacent to, and which slopes toward, the bed of a watercourse, and which is necessary to maintain the integrity of a watercourse. For purposes of this section, a bank will not be considered to extend more than 50 ft horizontally from the mean high water line; with the following exception: where a generally uniform slope of 45 degrees (100 percent) or greater adjoins the bed of the watercourse, the bank is extended to the crest of the slope or the first definable break in slope, either a natural or constructed (i.e., road or railroad grade) feature, lying generally parallel to the watercourse (6 NYCRR 608.1).
- *Bed* - the land area of a watercourse covered by water at mean high water (6 NYCRR 608.1).

- *Commissioner* - the Commissioner of Environmental Conservation or a duly authorized representative (6 NYCRR 364.1(c)).
- *Department* - the New York State Department of Environmental Conservation (6 NYCRR 364.1(c)).
- *Dredging* - the excavation or removal of sediment, soil, mud, sand, shells, gravel, or other aggregate from any tidal wetland or adjacent area for the direct or indirect purpose of establishing or increasing water depth, increasing the surface or cross-sectional area of a waterway, or obtaining such sediment, soil, mud, sand, gravel, shells, or other aggregate. Provided however, such term shall not include acquiring samples of sediment, soil, mud, sand, shells, gravel, or other aggregate; acquiring the natural products of tidal wetlands by recreational or commercial fishing, shellfishing, aquaculture, hunting, or trapping where otherwise legally permitted; or maintenance dredging (6 NYCRR 661.4).
- *Endangered Species* - those species of fish, shellfish, crustacea, and wildlife designated by the Department as seriously threatened with extinction (Consolidated Laws of New York, Annotated, Article 11, Title 5, Section 11-0535 (CLNYA 11-0535)). Those species of plants in danger of extinction throughout all or a significant portion of their ranges within the state and requiring remedial action to prevent such extinction (CLNYA 9-1503).
- *Exploitably Vulnerable Species* - those species of plant that are likely to become threatened in the near future throughout all or a significant portion of their ranges within the state if causal factors continue unchecked (CLNYA 9-1503).
- *Fill* - any solid or semisolid, organic or inorganic material including, but not limited to, earth, clay, silt, sand, gravel, stone, rock, shale, concrete, ashes, cinder, slag, metal, stumps, solid waste as defined in SOLID WASTE MANAGEMENT, or any other similar material, whether or not enclosed or contained by a structure (6 NYCRR 608.1).
- *Freshwater Wetlands* - lands and waters of the State which meet the definition provided in section 24-0107(1) of the *Freshwater Wetlands Act* (article 24 and title 23 of article 71 of the Environmental Conservation Law) and have an area of at least 12.4 acres (approximately 5 hectares) or, if smaller, have unusual local importance as determined by the Commissioner (6 NYCRR 663.2)
- *Indirect Placement of Fill* - positioning material landward and in close proximity to the mean high water elevation of a waterbody such that the material is introduced into the waterbody by natural erosive forces thereby creating a fill below the mean high water elevation (6 NYCRR 608.1).
- *Industrial Use* - any manufacturing, production, or assembly of goods or materials and any mineral extraction operation (6 NYCRR 661.4).
- *Inventory Map* - a final tidal wetlands boundary map established by the Commissioner depicting the boundary lines of tidal wetlands and filed in the office of the county clerk in the county in which such wetlands are located (6 NYCRR 661.4).
- *Maintenance Dredging* - excavation to restore the depth of underwater lands to elevations which are demonstrated to the reasonable satisfaction of the Department to have been lawfully in existence within 20 yr preceding the date of the application (6 NYCRR 661.4).
- *Mean Low Water* or *Mean High Water* - respectively, the approximate average low water level or high water level for a given body of water at a given location, that distinguishes between predominantly aquatic and predominantly terrestrial habitat as determined, in order of use, by the following (6 NYCRR 608.1):
  1. available hydrologic data, calculations, and other relevant information concerning water levels (e.g., discharge, storage, tidal, and other recurrent water elevation data); (mean high water elevations are established, using this method, for certain waterbodies as presented in 6 NYCRR 608.11)

2. vegetative characteristics (e.g., location, presence, absence, or destruction of terrestrial or aquatic vegetation)
  3. physical characteristics (e.g., clear natural line impressed on a bank, scouring, shelving, or the presence of sediments, litter, or debris)
  4. other appropriate means that consider the characteristics of the surrounding area.
- *Navigable Waters of the State* - all lakes, rivers, streams, and other bodies of water in the state that are navigable in fact or upon which vessels with a capacity of one or more persons can be operated notwithstanding interruptions to navigation by artificial structures, shallows, rapids, or other obstructions, or by seasonal variations in capacity to support navigation. It does not include waters that are surrounded by land held in single private ownership at every point in their total area (6 NYCRR 608.1).
  - *Permit* - that form of Departmental approval required for the carrying on of a regulated activity (6 NYCRR 661.4).
  - *Plants* - species of native shrubs, trees, herbs, ferns, fern-allies, and wild flowers (CLNYA 9-1503).
  - *Pollution* - the presence in the environment of conditions or contaminant in quantities or characteristics which are or may be injurious to human, plant, or marine life, wildlife, or other animal life, or to property, or which unreasonably interfere with the comfortable enjoyment of life and property throughout such tidal wetlands as may be affected thereby (6 NYCRR 661.4).
  - *Principal Building* - any one of the following: single-family dwelling; each two units of a multiple-family dwelling; any other type of building, including, but not limited to, any commercial or industrial use building or public or semipublic building, that exceeds 1000 ft<sup>2</sup> in area and each additional 1000 ft<sup>2</sup> of floor space of such a building in excess of 3000 ft<sup>2</sup>. In addition, each commercial or industrial use building or public or semipublic building less than 1000 ft<sup>2</sup> in area shall count as 1/4 of a principal building (6 NYCRR 661.4).
  - *Project* - any action which may result in direct or indirect physical impact on a tidal wetland, including, but not limited to, any regulated activity (6 NYCRR 661.4).
  - *Protected Stream* - any stream or particular portion of a stream for which there has been adopted by the Department or any of its predecessors any of the following classifications or standards: AA, AA(t), A, A(t), B, B(t), or C(t). Streams designated (t)(trout) also include those more specifically designated (ts)(trout spawning) (6 NYCRR 608.1).
  - *Public or Semipublic Building* - any municipal building, library building, school or college building, hospital building, building used as a place of worship, museum building, research center building, rehabilitation center building, or any similar building (6 NYCRR 661.4).
  - *Rare Species* - those species of plants that have small populations within their ranges in the state (CLNYA 9-1503).
  - *Regulated Activity* - means (6 NYCRR 661.4):
    1. any form of draining, dredging, excavation, or removal, either directly or indirectly, of soil, mud, sand, shells, gravel, or other aggregate
    2. any form of dumping, filling, or depositing, either directly or indirectly, of any soil, stones, sand, gravel, mud, rubbish, or fill of any kind
    3. the erection of any structures or construction of any facilities or roads, the driving of any pilings or placing of any other obstructions, whether or not changing the ebb and flow of the tide
    4. any form of pollution
    5. any portion of a subdivision of land located in any tidal wetland or adjacent area
    6. any other new activity within a tidal wetland or on an adjacent area which directly or indirectly may substantially alter or impair the natural condition or function of any tidal wetland.

- *Single-Family Dwelling* - any detached building containing one dwelling unit, including any mobile home (6 NYCRR 661.4).
- *Single Private Ownership* - the ownership by a person, joint ownership by more than one person or a single nongovernmental entity such as an association, corporation, trust, or estate. It does not include ownership by any unit of government, including a village, town, county, city, or the state or the United States or any subdivision, department, agency, or authority thereof (6 NYCRR 608.1).
- *Stream* - a watercourse or portion thereof, including the bed and banks thereof. Small ponds or lakes with a surface area at mean low water level of 10 acres or less and located in the course of a stream shall be considered part of a stream. A stream does not include a pond or lake having a surface area of greater than 10 acres at mean low water level (6 NYCRR 608.1).
- *Threatened Species* - those species of fish and wildlife designated by the Department which are likely to become endangered species within the foreseeable future throughout all or a significant portion of their range (CLNYA 11-0535). Those species of plants likely to become endangered within the foreseeable future throughout all or a significant portion of their ranges within the state (CLNYA 9-1503).
- *Tidal Wetlands* - any lands delineated as tidal wetlands on an inventory map and shall comprise the following classifications as delineated on such map (6 NYCRR 661.4):
  1. coastal fresh marsh - the tidal wetland zone, designated FM on an inventory map, found primarily in the upper tidal limits of riverine systems where significant fresh water inflow dominates the tidal zone. Species normally associated with this zone include narrow leaved cattail, *Typha angustifolia*; the tall brackish water cordgrasses, *Spartina pectinate* and/or *S. cynosuroides*; and the more typically emergent fresh water species such as arrow arum, *Peltandra*; pickerel weed, *Pondederia*; and cutgrass, *Leersia*
  2. intertidal marsh - the vegetated tidal wetland zone, designated IM on an inventory map, lying generally between average high and low tidal elevation. The predominant vegetation in this zone is low marsh cordgrass, *Spartina alterniflora*
  3. coastal shoals, bars, and flats - the tidal wetland zone, designated SM on an inventory map, that meets all of the following conditions:
    - a. at high tide is covered by water
    - b. at low tide is exposed or is covered by water to a maximum depth of approximately 1 ft
    - c. is not vegetated by low marsh cordgrass, *Spartina alterniflora*, except as otherwise determined in a specific case
  4. littoral zone - the tidal wetlands zone, designated LZ on an inventory map, that includes all lands under tidal waters which are not included in any other category, except as otherwise determined in a specific case. Provided, there shall be no littoral zone under waters deeper than 6 ft at mean low water. Pending determination by the Commissioner in a particular case, the most recent, as of 21 July 1992, national ocean survey maps published by the National Ocean Survey, National Oceanic and Atmospheric Administration shall be rebuttable presumptive evidence of such 6 ft depth.
  5. high marsh or salt meadow - the normal uppermost tidal wetland zone, designated HM on an inventory map, usually dominated by salt meadow grass, *Spartina patens*; and spike grass, *Distichlis spicata*. This zone is periodically flooded by spring and storm tides and is often vegetated by low vigor, *Spartina alterniflora* and Seaside lavender, *Limonium carolinianum*. Upper limits of this zone often include black grass, *Juncus Gerardi*; chairmaker's rush, *Scirpus sp*; marsh elder, *Iva frutescens*; and groundsel bush, *Baccharis halimifolia*.
  6. formerly connected tidal wetlands - the tidal wetlands zone, designated FC on an inventory map, in which normal tidal flow is restricted by manmade causes. Typical tidal wetland plant species may exist in such areas although they may be infiltrated with common reed, *Phragmites sp*.
- *Watercourse* - that area of land within which or upon which the flow of water is ordinarily confined due to existing topography (6 NYCRR 608.2).

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| <p align="center"><b>NATURAL RESOURCES MANAGEMENT<br/>GUIDANCE FOR NEW YORK CHECKLIST USERS</b></p> |  |
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| <p align="center"><b>REFER TO CHECKLIST ITEMS:</b></p> |  |
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|                           |                                 |
|---------------------------|---------------------------------|
| Missing Checklist Items   | NR.2.1.NY.                      |
| Dredging                  | NR.5.1.NY.                      |
| Land Management           | NR.10.1.NY.                     |
| Water Resource Management | NR.15.1.NY. through NR.15.7.NY. |
| Wildlife                  | NR.20.1.NY. through NR.20.3.NY. |

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| <p align="center"><b>GUIDANCE FOR APPENDIX USERS</b></p> |  |
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| <b>REFER TO APPENDIX NUMBERS:</b> | <b>REFER TO APPENDIX TITLES:</b> |
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| 5-1 | Activities on Tidal Wetlands Not Requiring a Permit                   |
| 5-2 | Endangered, Threatened, and Special Concern Wildlife                  |
| 5-3 | Endangered, Threatened, Exploitable Vulnerable and Rare Native Plants |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>NR.2.</b></p> <p><b>MISSING CHECKLIST<br/>ITEMS</b></p> <p><b>NR.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>NR.5.</b></p> <p><b>DREDGING</b></p> <p><b>NR.5.1.NY.</b> Excavation from or placement of fill in any of the navigable waters requires a valid permit (6 NYCRR 608.4(a)) [Citation Revised March 2008].</p> | <p>(NOTE: This checklist item was moved here from NR.15.6.NY.; January 1999.)</p> <p>Verify that facilities have obtained a valid permit prior to excavating from or placing fill in any of the navigable waters of the state or in marshes, estuaries, tidal marshes, and wetlands that are adjacent to and contiguous at any point to any of the navigable waters of the state and that are inundated at mean high-water level or tide.</p> |

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| <p><b>NR.10.</b></p> <p><b>LAND MANAGEMENT</b></p> <p><b>NR.10.1.NY.</b> Regulated activities on primary dunes must meet specific standards (6 NYCRR 505.8(d) and 505.8(e)) [Citation Revised March 2008].</p> | <p>Verify that there is no excavating, grading, or mining of primary dunes.</p> <p>Verify that there is no vehicular traffic on primary dunes except in those areas designated by the Department for dune crossing.</p> <p>Verify that no foot traffic causes sufficient damage to primary dunes to diminish the erosion protection afforded by the dunes.</p> <p>(NOTE: The following activities do not require a coastal erosion management permit:</p> <ul style="list-style-type: none"> <li>- the restoration of existing structures damaged or destroyed by events not related to coastal flooding and erosion</li> <li>- sand fencing and vegetative planting of salt spray tolerant native species for the purpose of sand dune stabilization or sand entrapment.)</li> </ul> <p>Verify that pedestrian passages across primary dunes utilize elevated walkways and stairways or other Department approved dune crossing structures.</p> <p>Verify that facilities that construct, modify, or restore the following structures on primary dunes obtain a valid coastal erosion management permit:</p> <ul style="list-style-type: none"> <li>- elevated walkways or stairways unless they are constructed solely for providing noncommercial pedestrian access to the beach</li> <li>- stone revetments or other erosion protection structures compatible with primary dunes.</li> </ul> <p>(NOTE: The following activities do not require a coastal erosion management permit:</p> <ul style="list-style-type: none"> <li>- the restoration of existing structures damaged or destroyed by events not related to coastal flooding and erosion</li> <li>- sand fencing and vegetative planting of salt spray tolerant native species for the purpose of sand dune stabilization or sand entrapment.)</li> </ul> <p>Verify that facilities that deposit clean sand obtained from excavation, dredging, or beach grading for the purpose of increasing a primary dune's size or to restore it do the following:</p> <ul style="list-style-type: none"> <li>- have a valid coastal erosion management permit</li> <li>- vegetatively stabilize the sand deposition with native species tolerant to salt spray and sand burial.</li> </ul> <p>Verify that secondary dunes are excavated, graded, or mined without diminishing</p> |



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|  | the erosion protection afforded by the dunes. |

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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>   |
| <p><b>NR.15.</b></p> <p><b>WATER RESOURCE MANAGEMENT</b></p> <p><b>NR.15.1.NY.</b> Activities that affect a freshwater wetlands or adjacent areas must be permitted (6 NYCRR 663.1(z), 663.4(a), (d), and 663.7) [Citation Revised March 2008].</p> | <p>(NOTE: The following activities are permit exempt provided that there is no significant impairment of the wetlands:</p> <ul style="list-style-type: none"> <li>- the establishment of scenic, historic, wildlife, and scientific preserves</li> <li>- boating, hiking, swimming, camping, picnicking and other similar nonmotorized forms of outdoor activity</li> <li>- depositing or removal of the natural products of the wetlands in the process of recreational or commercial fishing, shell fishing, aquaculture, hunting or trapping, including the erection and maintenance of temporary hides or blinds</li> <li>- conducting educational and scientific research activities</li> <li>- the establishment of walking trails</li> <li>- the establishment of an individual recreational mooring</li> <li>- agricultural activities</li> <li>- occasional use of all-terrain vehicles, air and motor boats, snowmobiles, or other motor vehicles</li> <li>- ordinary maintenance and repair of existing functional structures, facilities or improved areas.)</li> </ul> <p>Determine whether the facility conducts any of the following nonexempt activities on freshwater wetlands or adjacent areas:</p> <ul style="list-style-type: none"> <li>- any form of draining, dredging, excavation, or mining, either directly or indirectly</li> <li>- any form of dumping or filling, either directly or indirectly</li> <li>- erecting any structures, constructing roads, driving pilings, or placing any other obstructions whether or not changing the ebb and flow of the water</li> <li>- any form of pollution, including but not limited to installing a septic tank, running a sewer outfall, discharging sewage treatment effluent or other liquefied wastes into or so as to drain into a wetland</li> <li>- any other activity that substantially impairs any of the functions or benefits of the wetlands.</li> </ul> <p>Verify that the facility has either a valid permit or a letter of permission for the regulated activity.</p> <p>Verify that the facility meets all terms and conditions imposed by the permit or letter of permission.</p> <p>Verify that facility which carry out any regulated activity in response to an emergency event, notify the regional permit administrator in advance, if possible or within 24 h of the activity.</p> <p>(NOTE: This requirement does not apply to land uses, improvements, or</p> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>NR.15.2.NY.</b> Facilities that engage in regulated activities that affect tidal wetlands or adjacent areas must have a valid permit or a letter of permission (6 NYCRR 661.4(dd), 661.5, and 661.32) [Citation Revised March 2008].</p> | <p>developments for which final approval was obtained prior to 1 September 1975 from the local governmental authority with jurisdiction over such land use. However, expansion or significant modification of the existing use, or the introduction of any form of pollution, including, but not limited to, sewage effluent, runoff, or pesticides, or disposal of toxic substances into wetlands or adjacent areas are regulated. The requirement is also not applicable to wetlands or portions of wetlands within the Adirondack Park. Those wetlands or portions of wetlands are regulated by the Adirondack Park Agency and Adirondack Park local governments.)</p> <p>Verify that the facility obtains a permit prior to conducting any of the following types of regulated activities that impact any tidal wetlands or adjacent areas:</p> <ul style="list-style-type: none"> <li>- any form of draining, dredging, excavation, or removal, either directly or indirectly of soil, mud, sand, shells, gravel, or other aggregate</li> <li>- any form of dumping, filling or depositing, either directly or indirectly, of any soil, stones, sand, gravel, mud, rubbish, or fill of any kind</li> <li>- the erection of any structures or construction of any facilities or roads, the driving of any pilings or placing of any other obstructions, whether or not changing the ebb and flow of the tide</li> <li>- any form of pollution</li> <li>- any portion of a subdivision of land located in any tidal wetland or adjacent area</li> <li>- any other new activity within a tidal wetland or on an adjacent area that directly or indirectly may substantially alter or impair the natural condition or function of any tidal wetland.</li> </ul> <p>Verify that the facility meets the conditions and terms of the permit or letter of permission.</p> <p>Verify that facilities that carry out regulated activities in response to an emergency event including search and rescue operations, large-scale contamination prevention or remedial activities, any other public health concerns, notify the regional permit administrator in writing within 10 days of the activity.</p> <p>(NOTE: See Appendix 5-1 for a listing of activities not requiring a permit on specific types of tidal wetlands.)</p> |
| <p><b>NR.15.3.NY.</b> Regulated activities conducted on tidal wetlands must meet specific development restrictions (6 NYCRR 661.6) [Citation Revised March 2008].</p>  | <p>Verify that the minimum setback from the most landward edge of any tidal wetland is:</p> <ul style="list-style-type: none"> <li>- 75 ft from all principal buildings and all other structures in excess of 100 ft, excluding boardwalks, shoreline promenades, docks, bulkheads, piers, wharves, pilings, dolphins, or boathouses</li> <li>- 30 ft from all principal buildings and all other structures in excess of 100 ft<sup>2</sup></li> </ul>  |

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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
|---|---|
| <p><b>NR.15.4.NY.</b> Change, modification or disruption any protected stream requires a valid permit (6 NYCRR 608.2(a) and (b)) [Citation Revised March 2008].</p> | <p>when within the boundaries of the city of New York</p> <ul style="list-style-type: none"> <li>- 100 ft from any onsite sewage disposal septic tank, cesspool, leachfield, or seepage pit</li> <li>- 75 ft from all hard surface driveways, roads and parking lots, and similar impervious surfaces exceeding 500 ft<sup>2</sup> in size on the property involved</li> <li>- 30 ft from all hard surface driveways, roads and parking lots, and similar impervious surfaces exceeding 500 ft<sup>2</sup> in size on the property involved within the City of New York.</li> </ul> <p>Verify that at least 2 ft of soil are between the bottom of onsite sewage disposal cesspools, septic tanks, leachfields, or seepage pits and the seasonal high groundwater level, rock hardpan, or other impermeable materials.</p> <p>Verify that not more than 20 percent of the adjacent area on any lot is covered by existing and new structures and other impervious surfaces.</p> <p>(NOTE: Excluded is the coverage of 3000 ft<sup>2</sup> or less of adjacent area on any individual lot, lawfully existing on 20 August 1977 by existing and new structures and other impervious surfaces.)</p> <p>Verify that the minimum lot area for any principal building which includes any wetland portion and adjacent area is as follows:</p> <ul style="list-style-type: none"> <li>- 20,000 ft<sup>2</sup> where the principle building will be served by a public or community sewage disposal system (not applicable within New York City)</li> <li>- 40,000 ft<sup>2</sup> where the principal building will not be served by a public or community sewage disposal system.</li> <li>- dry wells</li> <li>- retention basins</li> <li>- filters</li> <li>- open wales</li> <li>- ponds.</li> </ul> <p>Determine whether the facility plans or has changed, modified or disturbed any protected stream, its bed or banks, or removed from its bed or banks sand, gravel or other material.</p> <p>Verify that the facility has a valid permit or meets one of the following criteria:</p> <ul style="list-style-type: none"> <li>- has obtained a written letter of exemption from the Department</li> <li>- agricultural activities limited to crossing and recrossing of a protected stream by livestock or wheeled farming equipment</li> <li>- withdrawing irrigation water for agricultural purposes that does not alter the stream</li> <li>- the height of the impounding structure does not stand more than 10 ft above the bed of the stream at any point</li> <li>- the quantity of water the structure impounds does not exceed 1,000,000 gal</li> <li>- farm pounds erected upon lands devoted to farming not in natural stream or</li> </ul> |

**COMPLIANCE CATEGORY:  
NATURAL RESOURCES MANAGEMENT  
New York Supplement**

| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
|--|---|
|  | <p>watercourses not including lands used for the purposes of soil conservation, fish propagation, irrigation, livestock watering and wildlife maintenance</p> <ul style="list-style-type: none"> <li>- general farm use formed by an earth embankment with an all-earth vegetated spillway and other accessory structures with the following criteria: <ul style="list-style-type: none"> <li>- the earth embankment does not exceed 15 ft</li> <li>- the farm pond capacity does not exceed 1,500,000 gal</li> <li>- the area draining into the farm pond does not exceed 200 acres</li> <li>- the pond comprises an area of 10 acres or less of surface water when full</li> <li>- the water is not diverted into the pond by an artificial obstruction in or across a natural stream or watercourse</li> </ul> </li> <li>- a dock pier, wharf or other structure under the jurisdiction of the Department of docks if any, in a city or town having a population of over 175,000</li> <li>- a dock, pier or wharf or other structure built on floats, columns, open timber piles or similar open-work supports having a top surface area of 200 ft<sup>2</sup> or less or is removed in the fall of each year and replaced in the spring.</li> </ul> <p>Verify that facilities that erect, reconstruct, or repair any of the following structures and are not exempt have a valid permit:</p> <ul style="list-style-type: none"> <li>- any dam or impoundment structure or other artificial obstruction, temporary or permanent in or across a natural stream or watercourse</li> <li>- any permanent dock, pier, wharf or other structure that may be used as a landing place on waters.</li> </ul> |
| <b>NR.15.5.NY.</b> [Deleted<br>January 1999].  |   |
| <b>NR.15.6.NY.</b> [Moved<br>January 1999].  | (NOTE: This checklist item moved to NR.5.1.NY.)   |
| <b>NR.15.7.NY.</b> A permit is required to construct, reconstruct, repair, breach, or remove any dam (6 NYCRR 608.3) [Added March 2010]. | <p>Verify that a permit is obtained to construct, reconstruct, repair, breach, or remove any dam.</p> <p>(NOTE: Exemptions to the permit requirement include:</p> <ul style="list-style-type: none"> <li>- the construction, reconstruction, repair, breach or removal of a dam that has a height less than 15 feet, and a maximum impoundment capacity less than three million gallons</li> <li>- the construction, reconstruction, repair, breach or removal of a dam with a height equal to or less than 6 feet, regardless of its maximum impoundment capacity, or a dam with a maximum impoundment capacity equal to or less than one million gallons, regardless of its height</li> <li>- the ordinary maintenance of a dam.)</li> </ul>  |

|  |  |
|--|--|
| <b>COMPLIANCE CATEGORY:</b><br><b>NATURAL RESOURCES MANAGEMENT</b><br><b>New York Supplement</b> |  |
| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b> |
|  |  |

**COMPLIANCE CATEGORY:  
NATURAL RESOURCES MANAGEMENT  
New York Supplement**

| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
|--|---|
| <p><b>NR.20.</b></p> <p><b>WILDLIFE</b></p> <p><b>NR.20.1.NY.</b> Wildlife standards must be met (CLNYA 11-0505, 11-0511, and 11-0513).</p> <p><b>NR.20.2.NY.</b> Endangered and threatened species of fish, shellfish, crustacea, and wildlife must be protected (CLNYA 11-0535 and 11-</p> | <p>Verify that no person:</p> <ul style="list-style-type: none"> <li>- obstructs the passage of fish in any stream or river by a screen or otherwise, unless authorized by the Department</li> <li>- holds back or diverts water in any stream which supplies a state hatchery so as to prevent the flow of sufficient water to the hatchery</li> <li>- takes fish from a state hatchery</li> <li>- on land inhabited by deer or bear, makes, sets, or uses either of the following: <ul style="list-style-type: none"> <li>- deer or bear traps</li> <li>- salt licks</li> </ul> </li> <li>- uses any device which prevents frogs from having free access to and egress from water</li> <li>- robs or willfully destroys a nest of any protected birds (see Appendix 5-2) without a permit</li> <li>- disturbs a beaver dam, house, or den, or a muskrat's house or den or any structure constructed by a muskrat in which it can take shelter, except as permitted by the Department</li> <li>- disturbs a nest box or any structure constructed to harbor wild birds, whether or not it is inhabited by wild birds, except for annual maintenance, or when deemed necessary</li> <li>- at any time, by any means, or in any manner, capture, kill, or attempt to kill any Antwerp or homing pigeon.</li> </ul> <p>Verify that no person, except under license or permit, possesses, transports, or causes to be transported, imported, or exported any of the following live animals where the Department finds it would present a danger to the health or welfare of the people of New York, an individual resident, or indigenous fish or wildlife:</p> <ul style="list-style-type: none"> <li>- wolf</li> <li>- coyote</li> <li>- coydog</li> <li>- fox</li> <li>- skunk</li> <li>- raccoon</li> <li>- endangered species (see Appendix 5-2)</li> <li>- other species of native or nonnative live wildlife or fish.</li> </ul> <p>Verify that a license or permit is obtained before any endangered or threatened species (see Appendix 5-2) is taken, imported, transported, or held.</p> <p>Verify that any endangered and threatened species and their habitats are protected.</p> |

| COMPLIANCE CATEGORY:<br>NATURAL RESOURCES MANAGEMENT<br>New York Supplement  |   |  |
|--|---|--|
| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>March 2010  |  |
| 0536) [Citation Revised<br>March 2008].  | <p>Verify that no person sells or possesses with the intent to sell, any article made in whole or part of any endangered or threatened species of fish, shellfish, crustacea, or wildlife, except with a license or permit from the Department.</p> <p>Verify that no part of the skin or body, whether raw or manufactured, of the following wild animals or the animal itself is sold or offered for sale:</p> <ul style="list-style-type: none"> <li>- leopard (<i>Panthera pardus</i>)</li> <li>- snow leopard (<i>Uncia</i>)</li> <li>- clouded leopard (<i>Neofelis nebulosa</i>)</li> <li>- tiger (<i>Panthera tigris</i>)</li> <li>- Asiatic lion (<i>Panthera leo persica</i>)</li> <li>- cheetah (<i>Acinonyx jubatus</i>)</li> <li>- alligators, caiman, or crocodile of the order <i>Crocodylia</i></li> <li>- tortoises of the genus <i>Gopherus</i></li> <li>- marine turtles of the family <i>Cheloniidae</i> and the family <i>Dermochelidae</i></li> <li>- vicuna (<i>Vicugna vicugna</i>)</li> <li>- wolf (<i>Canis lupus</i>)</li> <li>- red wolf (<i>Canis niger</i>)</li> <li>- kangaroo (<i>Macropodidae</i>)</li> <li>- polar bear (<i>Thalarctos maritimus</i>)</li> <li>- mountain lion (<i>Felis concolor</i>)</li> <li>- jaguar (<i>Panthera onca</i>)</li> <li>- ocelot (<i>Felis pardalis</i>)</li> <li>- margay (<i>Felis wiedii</i>).</li> </ul> |  |
| NR.20.3.NY. Endangered, threatened, exploitably vulnerable, and rare plants must be protected (6 NYCRR 193.3) [Citation Revised March 2008]. | Verify that protected plants (see Appendix 5-3) are not picked, plucked, severed, removed, or damaged by the application of herbicides or defoliants, or carried away.  |  |



## Appendix 5-1

### Activities on Tidal Wetlands Not Requiring a Permit (Source: 6 NYCRR 661.5) [Citation Revised March 2008]

| Uses   | Area Category*         |
|--|------------------------|
| Continuance of lawfully existing uses (including, but not limited to residential, commercial, industrial, agricultural, recreational, and public uses) and the continuance of all activities normally and directly associated with any such use, where such continuance does not involve expansion or significant alteration of the existing used  | FM, IM, HM, SM, LZ, AA |
| Boating, hiking, swimming, camping, picnicking, and other similar nonmotorized forms of outdoor activities   | FM, IM, HM, SM, LZ, AA |
| Depositing or removing the natural products of a tidal wetland (or adjacent area) in the process of recreational or commercial fishing, shell-fishing, aquaculture, hunting or trapping, including the erection and maintenance of temporary hides or blinds   | FM, IM, HM, SM, LZ, AA |
| Establish plantings  | AA                     |
| Operation of motor vehicles, including, but no limited to, air boats and other all terrain vehicles, for other than educational or scientific purposes (provided this item does not include operation of aircraft or mechanically propelled vessel other than air boats  | AA                     |
| Operation of aircraft or mechanical propelled vessels other than air boats   | FM, IM, HM, SM, LZ, AA |
| Installing a floating dock(s) totaling less than 200 ft <sup>2</sup> in area   | SM, LZ, AA             |
| Relocation and/or rearrangement of floating docks, open pile docks, and similar structures   | SM, LZ, AA             |
| Ordinary maintenance and repair (not involving expansion or substantial restoration, reconstruction, or modification) of existing functional structures, facilities, or improved areas, including, but not limited to, bridges, roads, highways, railroad beds, bulkheads, docks, beaches, piers, wharves, pilings, dolphins, buildings, landscaped or paved areas, lawns, and agricultural and mosquito control ditches | FM, IM, HM, SM, LZ, AA |
| Routine beach regrading and cleaning, both above and below mean high water mark  | SM, LZ, AA             |
| Substantial restoration, reconstruction, modification, or expansion of existing functional residential structures which are and will continue to be located 75 ft or more (or 30 ft or more in New York City) from the most landward edge of any tidal wetland   | AA                     |
| Construction of accessory structures or facilities for existing residential structures where such accessory structures or facilities are and will continue to be in full compliance with the development restrictions of this part   | AA                     |
| The use or application of any chemical, petrochemical, or other toxic material, including any pesticide, where otherwise authorized by law, or the storage of any such material for purposes other than wholesaling or distribution to persons other than the ultimate users of such materials   | FM, IM, HM, SM, LZ, AA |

\* FM = Coastal Fresh Marsh  
 IM = Intertidal Marsh  
 SM = Coastal Shoals, Bars, and Flats  
 LZ = Littoral Zone  
 HM = High Marsh or Salt Meadow  
 AA = Adjacent Area

## Appendix 5-2

### Endangered, Threatened, and Special Concern Wildlife

(Source: New York Natural Heritage Program, <http://www.dec.ny.gov/animals/7494.html>)

[Revised March 2005; Revised March 2008]

| Common Name                                | Species                              |
|--|--------------------------------------|
| <b>ENDANGERED:</b>                         |                                      |
| <b>Molluscs:</b>                           |                                      |
| Dwarf Wedgemussel                          | <i>Alasmodonta heterodon</i>         |
| Pink mucket                                | <i>Lampsilis abrupta</i>             |
| Clubshell                                  | <i>Pleurobema clava</i>              |
| Fat pocketbook                             | <i>Potamilus capax</i>               |
| Rayed Bean                                 | <i>Villosa fabalis</i>               |
| Chittenango Ovate Amber snail              | <i>Novisuccinea chittenangoensis</i> |
| <b>Insects:</b>                            |                                      |
| Tomah Mayfly                               | <i>Siphonisca aerodromia</i>         |
| <sup>1,3</sup> American Burying Beetle     | <i>Nicrophorus americanus</i>        |
| Hessel's Hairstreak                        | <i>Callophrys hesseli</i>            |
| <sup>1</sup> Karner Blue Butterfly         | <i>Lycaeides melissa samuelis</i>    |
| Regal Fritillary                           | <i>Speyeria idalia</i>               |
| Persius Duskywing                          | <i>Erynnis persius</i>               |
| Grizzled Skipper                           | <i>Pyrgus centaureae wyandot</i>     |
| Arogos Skipper                             | <i>Atrytone arogos arogos</i>        |
| Bog Buckmoth                               | <i>Hemileuca species 1</i>           |
| Pine Pinion Moth                           | <i>Lithophane lepida lepida</i>      |
| <b>Fishes:</b>                             |                                      |
| Shortnose sturgeon                         | <i>Acipenser brevirostrum</i>        |
| Silver Chub                                | <i>Macrhybopsis storeriana</i>       |
| Round whitefish                            | <i>Prosopium cylindraceum</i>        |
| Pugnose shiner                             | <i>Notropis anogenus</i>             |
| Bluebreast darter                          | <i>Etheostoma camurum</i>            |
| Gilt darter                                | <i>Percina evides</i>                |
| Spoonhead sculpin                          | <i>Cottus ricei</i>                  |
| Deepwater sculpin                          | <i>Myoxocephalus thompsoni</i>       |
| <b>Amphibians:</b>                         |                                      |
| Tiger salamander                           | <i>Ambystoma tigrinum</i>            |
| Nothorn Cricket Frog                       | <i>Acris crepitans</i>               |
| <b>Reptiles:</b>                           |                                      |
| Mud Turtle                                 | <i>Kinosternon subrubrum</i>         |
| <sup>2</sup> Bog Turtle                    | <i>Clemmys muhlenbergii</i>          |
| <sup>1</sup> Atlantic Hawksbill Sea Turtle | <i>Eretmochelys imbricata</i>        |
| <sup>1</sup> Atlantic Ridley Sea Turtle    | <i>Lepidochelys kempii</i>           |
| <sup>1</sup> Leatherback Sea Turtle        | <i>Dermochelys coriacea</i>          |
| Queen Snake                                | <i>Regina septemvittata</i>          |
| Massasauga                                 | <i>Sistrurus catenatus</i>           |
| <b>Birds:</b>                              |                                      |
| Spruce Grouse                              | <i>Falcipennis canadensis</i>        |

| Common Name   | Species  |
|---|--|
| <sup>3</sup> Golden Eagle<br>Peregrine Falcon<br>Black Rail<br><sup>1,2,4</sup> Piping Plover<br><sup>1,3</sup> Eskimo Curlew<br><sup>1</sup> Roseate Tern<br>Black Tern<br>Short-eared Owl<br>Loggerhead Shrike  | <i>Aquila chrysaetos</i><br><i>Falco peregrinus</i><br><i>Laterallus jamaicensis</i><br><i>Charadrius melodus</i><br><i>Numenius borealis</i><br><i>Sterna dougallii dougallii</i><br><i>Chlidonias niger</i><br><i>Asio flammeus</i><br><i>Lanius ludovicianus</i>  |
| <b>Mammals:</b>   |  |
| <sup>1</sup> Indiana Bat<br><sup>3</sup> Allegheny Woodrat<br><sup>1</sup> Sperm Whale<br><sup>1</sup> Sei Whale<br><sup>1</sup> Blue Whale<br><sup>1</sup> Finback Whale<br><sup>1</sup> Humpback Whale<br><sup>1</sup> Right Whale<br><sup>1,3</sup> Gray Wolf<br><sup>1,3</sup> Cougar | <i>Myotis sodalis</i><br><i>Neotoma magister</i><br><i>Physeter catodon</i><br><i>Balaenoptera borealis</i><br><i>Balaenoptera musculus</i><br><i>Balaenoptera physalus</i><br><i>Megaptera novaeangliae</i><br><i>Eubalaena glacialis</i><br><i>Canis lupus</i><br><i>Felis concolor</i>  |
| <b>THREATENED:</b>  |  |
| <b>Molluses:</b>  |  |
| Brook Floater<br>Wavy-rayed Lampmussel<br>Green Floater   | <i>Alasmodonta varicosa</i><br><i>Lampsilis fasciola</i><br><i>Lasmigona subviridis</i>  |
| <b>Insects:</b>   |  |
| Pine Barrens Bluet<br>Scarlet Bluet<br>Little Bluet<br>Northeastern beach Tiger<br>Frosted Elf  | <i>Enallagma recurvatum</i><br><i>Enallagma pictum</i><br><i>Enallagma minisculum</i><br><i>Cicindela dorsalis dorsalis</i><br><i>Callophrys irus</i>  |
| <b>Fishes:</b>  |  |
| Lake Sturgeon<br>Mooneye<br><sup>3</sup> Lake Chubsucker<br>Gravel Chub<br><sup>3</sup> Mud Sunfish<br>Banded Sunfish<br>Longear Sunfish<br>Longhead Darter<br>Eastern Sand Darter<br>Swamp Darter<br>Spotted Darter  | <i>Acipenser fulvescens</i><br><i>Hiodon tergisus</i><br><i>Erimyzon sucetta</i><br><i>Erimystax x-punctata</i><br><i>Acantharchus pomotis</i><br><i>Enneacanthus obesus</i><br><i>Lepomis megalotis</i><br><i>Percina macrocephala</i><br><i>Ammocrypta pellucida</i><br><i>Etheostoma fusiforme</i><br><i>Etheostoma maculatum</i> |
| <b>Amphibians:</b>  |  |
| None Listed   |  |
| <b>Reptiles:</b>  |  |
| Blanding's Turtle<br><sup>2</sup> Green Sea Turtle  | <i>Emydoidea blandingii</i><br><i>Chelonia mydas</i>   |

| Common Name                        | Species                             |
|------------------------------------|-------------------------------------|
| <sup>2</sup> Loggerhead Sea Turtle | <i>Caretta caretta</i>              |
| Fence Lizard                       | <i>Sceloporus undulatus</i>         |
| Timber Rattlesnake                 | <i>Crotalus horridus</i>            |
| <b>Birds:</b>                      |                                     |
| Pied-billed Grebe                  | <i>Podilymbus podiceps</i>          |
| Least Bittern                      | <i>Ixobrychus exilis</i>            |
| Bald Eagle                         | <i>Haliaeetus leucocephalus</i>     |
| King Rail                          | <i>Rallus elegans</i>               |
| Upland Sandpiper                   | <i>Bartramia longicauda</i>         |
| Common tern                        | <i>Sterna hirundo</i>               |
| Least Tern                         | <i>Sterna antillarum</i>            |
| Sedge Wren                         | <i>Cistothorus platensis</i>        |
| Henslow's Sparrow                  | <i>Ammodramus henslowii</i>         |
| <b>Mammals</b>                     |                                     |
| <sup>3</sup> Canada Lynx           | <i>Lynx canadensis</i>              |
| <b>SPECIAL CONCERN:</b>            |                                     |
| <b>Molluses:</b>                   |                                     |
| Buffalo Pebble Snail               | <i>Gillia altilis</i>               |
| Fringed Valvata                    | <i>Valvata lewisi</i>               |
| Mossy Valvata                      | <i>Valvata sincera</i>              |
| <b>Insects:</b>                    |                                     |
| Unnamed Dragonfly Species          | <i>Gomphus spec. nov</i>            |
| Southern Sprite                    | <i>Nehalennia integricollis</i>     |
| Extra Striped Snaketail            | <i>Ophiogomphus anomalus</i>        |
| Pygmy Snaketail                    | <i>Ophiogomphus howei</i>           |
| Common Sanddragon                  | <i>Progomphus obscurus</i>          |
| Gray Petaltail                     | <i>Tachopteryx thoreyi</i>          |
| Checkered White                    | <i>Pontia protodice</i>             |
| Olympia Marble                     | <i>Euchloe olympia</i>              |
| Henry's Elfin                      | <i>Callophrys henrici</i>           |
| Tawny Crescent                     | <i>Phyciodes batesii</i>            |
| Mottled Duskywing                  | <i>Erynnis martialis</i>            |
| Barrens Buckmoth                   | <i>Hemileuca maia</i>               |
| Herodias Underwing                 | <i>Catocala herodias gerhardi</i>   |
| Jair Underwing                     | <i>Catocala jair</i>                |
| A Noctuid Moth                     | <i>Heterocampa varia</i>            |
| <b>Fishes:</b>                     |                                     |
| Mountain Brook Lamprey             | <i>Ichthyomyzon greeleyi</i>        |
| Black Redhorse                     | <i>Moxostoma duquesnei</i>          |
| Streamline Chub                    | <i>Erymystax dissimilis</i>         |
| Redfin Shiner                      | <i>Lythrurus umbratilis</i>         |
| Ironcolor Shiner                   | <i>Notropis chalybaeus</i>          |
| <b>Amphibians:</b>                 |                                     |
| Hellbender                         | <i>Cryptobranchus alleganiensis</i> |
| Marbled Salamander                 | <i>Ambystoma opacum</i>             |
| Jefferson Salamander               | <i>Ambystoma jeffersonianum</i>     |
| Blue-spotted Salamander            | <i>Ambystoma laterale</i>           |

| Common Name             | Species   |
|-------------------------|---|
| Longtail Salamander     | <i>Eurycea longicauda</i>                         |
| Eastern Spadefoot Toad  | <i>Scaphiopus holbrookii</i>                      |
| Southern Leopard Frog   | <i>Rana sphenoccephala</i><br><i>utricularius</i> |
| <b>Reptiles:</b>        |   |
| Spotted turtle          | <i>Clemmys guttata</i>                            |
| Eastern Box Turtle      | <i>Terrapene carolina</i>                         |
| Eastern Spiny Softshell | <i>Apalone spinifera</i>                          |
| Wood turtle             | <i>Clemmys insculpta</i>                          |
| Worm snake              | <i>Carphophis amoenus</i>                         |
| Eastern hognose snake   | <i>Heterodon platyrhinos</i>                      |
| <b>Birds:</b>           |   |
| Common Loon             | <i>Gavia immer</i>                                |
| American Bittern        | <i>Botaurus lentiginosus</i>                      |
| Osprey                  | <i>Pandion haliaetus</i>                          |
| Sharp-shinned Hawk      | <i>Accipiter striatus</i>                         |
| Cooper's Hawk           | <i>Accipiter cooperii</i>                         |
| Northern Goshawk        | <i>Accipiter gentilis</i>                         |
| Red-shouldered Hawk     | <i>Buteo lineatus</i>                             |
| Black Skimmer           | <i>Rynchops niger</i>                             |
| Common Nighthawk        | <i>Chordeiles minor</i>                           |
| Whip-poor-will          | <i>Caprimulgus vociferus</i>                      |
| Red-headed Woodpecker   | <i>Melanerpes erythrocephalus</i>                 |
| Horned Lark             | <i>Eremophila alpestris</i>                       |
| Bicknell's Thrush       | <i>Catharus bicknelli</i>                         |
| Golden-winged Warbler   | <i>Vermivora chrysoptera</i>                      |
| Cerulean Warbler        | <i>Dendroica cerulea</i>                          |
| Yellow-breasted Chat    | <i>Icteria virens</i>                             |
| Vesper Sparrow          | <i>Poocetes gramineus</i>                         |
| Grasshopper Sparrow     | <i>Ammodramus savannarum</i>                      |
| Seaside Sparrow         | <i>Ammodramus maritimus</i>                       |
| <b>Mammals:</b>         |   |
| Small-Footed bat        | <i>Myotis leibii</i>                              |
| New England cottontail  | <i>Sylvilagus transitionalis</i>                  |
| Harbor porpoise         | <i>Phocoena phocoena</i>                          |

### Appendix 5-3

#### Endangered, Threatened, Exploitable Vulnerable, and Rare Native Plants

(Source: 6 NYCRR 193.3 (b) through(e)) [Revised March 2008]

(b) The following are endangered native plants in danger of extirpation throughout all or a significant portion of their ranges within the State and requiring remedial action to prevent such extinction.

| Species   | Common Name                   |
|---|-------------------------------|
| <i>Acalypha virginica</i> var. <i>virginica</i>       | Virginia Three-seeded Mercury |
| <i>Adoxa moschatellina</i>                            | Moschatel                     |
| <i>Agalinis acuta</i>                                 | Sandplain Gerardia            |
| <i>Allium burdickii</i>                               | Wild Leek                     |
| <i>Amaranthus pumilus</i>                             | Seabeach Amaranth             |
| <i>Amelanchier nantucketensis</i>                     | Nantucket Juneberry           |
| <i>Ammophila champlainensis</i>                       | Champlain Beachgrass          |
| <i>Amphicarpum purshii</i>                            | Peanut Grass                  |
| <i>Angelica lucida</i>                                | Angelica                      |
| <i>Anthoxanthum monticulum</i> ssp. <i>orthanthum</i> | Alpine Sweetgrass             |
| <i>Aplectrum hyemale</i>                              | Puttyroot                     |
| <i>Arabis drummondii</i>                              | Drummond's Rock Cress         |
| <i>Arabis shortii</i>                                 | Toothed Rock-cress            |
| <i>Aristolochia serpentaria</i>                       | Virginia Snakeroot            |
| <i>Arnica lanceolata</i>                              | Arnica                        |
| <i>Artemisia campestris</i> var. <i>borealis</i>      | Wild Sage                     |
| <i>Asclepias variegata</i>                            | White Milkweed                |
| <i>Asplenium bradleyi</i>                             | Bradley's Spleenwort          |
| <i>Asplenium trichomanes</i> - <i>ramosum</i>         | Green Spleenwort              |
| <i>Aster ciliolatus</i>                               | Lindley's Aster               |
| <i>Aster concolor</i>                                 | Silvery Aster                 |
| <i>Aster laevis</i> var. <i>concinus</i>              | Smooth Blue Aster             |
| <i>Aster lanceolatus</i> var. <i>interior</i>         | Tall White Aster              |
| <i>Aster lateriflorus</i> var. <i>hirsuticaulis</i>   | Calico Aster                  |
| <i>Aster oolentangiensis</i>                          | Sky-blue Aster                |
| <i>Aster puniceus</i> var. <i>firmus</i>              | Cornel-leaved Aster           |
| <i>Aster radula</i>                                   | Swamp Aster                   |
| <i>Astragalus neglectus</i>                           | Cooper's Milkvetch            |
| <i>Atriplex glabriuscula</i>                          | Seaside Orach                 |
| <i>Atriplex subspicata</i>                            | Orache                        |
| <i>Bartonia paniculata</i>                            | Screw-stem                    |
| <i>Betula glandulosa</i>                              | Tundra Dwarf Birch            |
| <i>Betula minor</i>                                   | Dwarf White Birch             |
| <i>Bidens hyperborea</i>                              | Estuary Beggar-ticks          |
| <i>Blephilia ciliata</i>                              | Downy Wood-mint               |
| <i>Botrychium campestre</i>                           | Prairie Dunewort              |
| <i>Botrychium lunaria</i>                             | Moonwort                      |
| <i>Botrychium minganense</i>                          | Mingan Moonwort               |
| <i>Botrychium oneidense</i>                           | Blunt-lobe Grape Fern         |
| <i>Botrychium rugulosum</i>                           | Rugulose Grape Fern           |
| <i>Bouteloua curtipendula</i>                         | Side-oats Grama               |
| <i>Buchnera americana</i>                             | Blue-hearts                   |
| <i>Cacalia suaveolens</i>                             | Sweet-scented Indian-plantain |
| <i>Calamagrostis perplexa</i>                         | Wood Reedgrass                |
| <i>Calamagrostis porteri</i> ssp. <i>porteri</i>      | Porter's Reedgrass            |

| Species  | Common Name                 |
|--|-----------------------------|
| <i>Calamagrostis stricta</i> ssp. <i>stricta</i>         | Northern Reedgrass          |
| <i>Callitriche hermaphroditica</i>                       | Autumnal Water-starwort     |
| <i>Calypso bulbosa</i>                                   | Calypso                     |
| <i>Cardamine rotundifolia</i>                            | Mountain Watercress         |
| <i>Carex aggregata</i>                                   | Glomerate Sedge             |
| <i>Carex amphibola</i> var. <i>amphibola</i>             | Narrow-leaved Sedge         |
| <i>Carex arcta</i>                                       | Northern Clustered Sedge    |
| <i>Carex atherodes</i>                                   | Awed Sedge                  |
| <i>Carex atratiformis</i>                                | Black Sedge                 |
| <i>Carex barrattii</i>                                   | Barratt's Sedge             |
| <i>Carex bullata</i>                                     | Button Sedge                |
| <i>Carex capillaris</i>                                  | Hair-like Sedge             |
| <i>Carex caroliniana</i>                                 | Carolina Sedge              |
| <i>Carex collinsii</i>                                   | Collins' Sedge              |
| <i>Carex conjuncta</i>                                   | Soft Fox Sedge              |
| <i>Carex decomposita</i>                                 | Cypress-knee Sedge          |
| <i>Carex emoryi</i>                                      | Emory's Sedge               |
| <i>Carex flaccosperma</i> var. <i>glaucodea</i>          | Glaucous Sedge              |
| <i>Carex frankii</i>                                     | Frank's Sedge               |
| <i>Carex garberi</i>                                     | Elk Sedge                   |
| <i>Carex gynocrates</i>                                  | Northern Bog Sedge          |
| <i>Carex haydenii</i>                                    | Cloud Sedge                 |
| <i>Carex laxiflora</i> var. <i>serrulata</i>             | Loose-flowered Sedge        |
| <i>Carex livida</i> var. <i>radiculis</i>                | Livid Sedge                 |
| <i>Carex meadii</i>                                      | Mead's Sedge                |
| <i>Carex mesochorea</i>                                  | Midland Sedge               |
| <i>Carex nigra</i>                                       | Black Sedge                 |
| <i>Carex nigromarginata</i>                              | Black-edge Sedge            |
| <i>Carex retroflexa</i>                                  | Reflexed Sedge              |
| <i>Carex scirpoidea</i>                                  | Canadian Single-spike Sedge |
| <i>Carex shortiana</i>                                   | Short's Sedge               |
| <i>Carex straminea</i>                                   | Straw Sedge                 |
| <i>Carex striatula</i>                                   | Lined Sedge                 |
| <i>Carex styloflexa</i>                                  | Bent Sedge                  |
| <i>Carex sychnocephala</i>                               | Many-head Sedge             |
| <i>Carex tenuiflora</i>                                  | Sparse-flowered Sedge       |
| <i>Carex tinctoria</i>                                   | Tinged Sedge                |
| <i>Carex vaginata</i>                                    | Sheathed Sedge              |
| <i>Carex venusta</i> var. <i>minor</i>                   | Graceful Sedge              |
| <i>Carex wiegandii</i>                                   | Wiegand's Sedge             |
| <i>Castilleja coccinea</i>                               | Scarlet Indian-paintbrush   |
| <i>Ceanothus herbaceus</i>                               | Prairie Redroot             |
| <i>Chaerophyllum procumbens</i>                          | Spreading Chervil           |
| <i>Chasmanthium laxum</i>                                | Slender Spikegrass          |
| <i>Cheilanthes lanosa</i>                                | Wooly Lip-fern              |
| <i>Chenopodium album</i> var. <i>missouriense</i>        | Missouri Goosefoot          |
| <i>Chenopodium berlandieri</i> var. <i>macrocalycium</i> | Large Calyx Goosefoot       |
| <i>Collinsia verna</i>                                   | Blue-eyed-mary              |
| <i>Corallorhiza striata</i>                              | Striped Coralroot           |
| <i>Corema conradii</i>                                   | Broom Crowberry             |
| <i>Cornus drummondii</i>                                 | Rough-leaf Dogwood          |
| <i>Crassula aquatica</i>                                 | Pigmyweed                   |
| <i>Crataegus berberifolia</i>                            | Hawthorn                    |
| <i>Crataegus compacta</i>                                | Compact Hawthorn            |

| Species   | Common Name                |
|---|----------------------------|
| <i>Crataegus mollis</i>                                   | Downy Hawthorn             |
| <i>Crataegus uniflora</i>                                 | Dwarf Hawthorn             |
| <i>Crotalaria sagittalis</i>                              | Rattlebox                  |
| <i>Cuscuta cephalanthi</i>                                | Button-bush Dodder         |
| <i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>         | Southern Dodder            |
| <i>Cuscuta polygonorum</i>                                | Smartweed Dodder           |
| <i>Cynoglossum virginianum</i> var. <i>boreale</i>        | Northern Wild Comfrey      |
| <i>Cynoglossum virginianum</i> var. <i>virginianum</i>    | Wild Comfrey               |
| <i>Cyperus echinatus</i>                                  | Globose Flatsedge          |
| <i>Cyperus flavescens</i> var. <i>flavescens</i>          | Yellow Flatsedge           |
| <i>Cyperus polystachyos</i> var. <i>texensis</i>          | Coast Flatsedge            |
| <i>Cyperus retrorsus</i>                                  | Retorse Flatsedge          |
| <i>Cypripedium candidum</i>                               | Small White Ladyslipper    |
| <i>Cypripedium parviflorum</i> var. <i>parviflorum</i>    | Small Yellow Ladyslipper   |
| <i>Cystopteris protrusa</i>                               | Lowland Fragile Fern       |
| <i>Descurainia pinnata</i> ssp. <i>brachycarpa</i>        | Northern Tansey-mustard    |
| <i>Desmodium humifusum</i>                                | Spreading Tick-clover      |
| <i>Desmodium laevigatum</i>                               | Smooth Tick-clover         |
| <i>Desmodium nuttallii</i>                                | Nuttall's Tick-clover      |
| <i>Desmodium obtusum</i>                                  | Beggar-lice                |
| <i>Desmodium pauciflorum</i>                              | Small-flowered Tick-clover |
| <i>Diarrhena obovata</i>                                  | Beakgrass                  |
| <i>Diplachne maritima</i>                                 | Salt-meadow Grass          |
| <i>Draba glabella</i>                                     | Rock-cress                 |
| <i>Dracocephalum parviflorum</i>                          | American Dragonhead        |
| <i>Dryopteris celsa</i>                                   | Log Fern                   |
| <i>Dryopteris fragrans</i>                                | Fragrant Cliff Fern        |
| <i>Eclipta prostrata</i>                                  | Yerba-de-tago              |
| <i>Elatine americana</i>                                  | American Waterwort         |
| <i>Eleocharis elliptica</i> var. <i>pseudoptera</i>       | Slender Spikerush          |
| <i>Eleocharis engelmannii</i>                             | Engelmann's Spikerush      |
| <i>Eleocharis fallax</i>                                  | Creeping Spikerush         |
| <i>Eleocharis obtusa</i> var. <i>ovata</i>                | Blunt Spikerush            |
| <i>Eleocharis quadrangulata</i>                           | Angled Spikerush           |
| <i>Eleocharis tricostata</i>                              | Three-ribbed Spikerush     |
| <i>Empetrum eamesii</i> ssp. <i>atropurpureum</i>         | Purple Crowberry           |
| <i>Epilobium ciliatum</i> ssp. <i>glandulosum</i>         | Willow-herb                |
| <i>Epilobium hornemannii</i>                              | Alpine Willow-herb         |
| <i>Equisetum laevigatum</i>                               | Smooth Scouring Rush       |
| <i>Erechtites hieraciifolia</i> var. <i>megalocarpa</i>   | Fireweed                   |
| <i>Erigenia bulbosa</i>                                   | Harbinger-of-spring        |
| <i>Erigeron hyssopifolius</i>                             | Daisy Fleabane             |
| <i>Eriophorum angustifolium</i> ssp. <i>scabriusculum</i> | Narrow-leaf Cottongrass    |
| <i>Euonymus americana</i>                                 | American Strawberry-bush   |
| <i>Eupatorium aromaticum</i>                              | Small White Snakeroot      |
| <i>Eupatorium leucolepis</i> var. <i>leucolepis</i>       | White Boneset              |
| <i>Eupatorium rotundifolium</i> var. <i>ovatum</i>        | Round-leaf Boneset         |
| <i>Eupatorium rotundifolium</i> var. <i>rotundifolium</i> | Round-leaf Boneset         |
| <i>Eupatorium serotinum</i>                               | Late Boneset               |
| <i>Euphorbia ipecacuanhae</i>                             | Ipecac Spurge              |
| <i>Festuca saximontana</i>                                | Sheep Fescue               |
| <i>Galium concinnum</i>                                   | Shining Bedstraw           |
| <i>Galium kamtschaticum</i>                               | Northern Wild-licorice     |
| <i>Gaylussacia dumosa</i> var. <i>bigeloviana</i>         | Dwarf Huckleberry          |



| Species   | Common Name              |
|---|--------------------------|
| <i>Gentiana saponaria</i>                           | Soapwort Gentian         |
| <i>Gentianopsis procera</i>                         | Lesser Fringed Gentian   |
| <i>Geocaulon lividum</i>                            | Purple Comandra          |
| <i>Geum vernum</i>                                  | Spring Avens             |
| <i>Geum virginianum</i>                             | Rough Avens              |
| <i>Gnaphalium helleri</i> var. <i>micradenium</i>   | Catfoot                  |
| <i>Gnaphalium purpureum</i>                         | Purple Everlasting       |
| <i>Gnaphalium sylvaticum</i>                        | Woodland Cudweed         |
| <i>Gymnocladus dioica</i>                           | Kentucky Coffee Tree     |
| <i>Hackelia deflexa</i> var. <i>americana</i>       | Northern Stickseed       |
| <i>Halenia deflexa</i>                              | Spurred Gentian          |
| <i>Hippuris vulgaris</i>                            | Mare's-tail              |
| <i>Houstonia purpurea</i> var. <i>calycosa</i>      | Purple Bluets            |
| <i>Houstonia purpurea</i> var. <i>purpurea</i>      | Purple Bluets            |
| <i>Huperzia selago</i>                              | Fir Clubmoss             |
| <i>Hydrangea arborescens</i>                        | Wild Hydrangea           |
| <i>Hydrocotyle ranunculoides</i>                    | Floating Pennywort       |
| <i>Hydrocotyle verticillata</i>                     | Water-pennywort          |
| <i>Hypericum adpressum</i>                          | Creeping St. John's-wort |
| <i>Hypericum densiflorum</i>                        | Bushy St. John's-wort    |
| <i>Hypericum denticulatum</i>                       | Coppery St. John's-wort  |
| <i>Hypericum hypercoides</i> ssp. <i>multicaule</i> | St. Andrew's Cross       |
| <i>Ipomoea pandurata</i>                            | Wild Potato-vine         |
| <i>Iris virginica</i> var. <i>schrevei</i>          | Southern Blueflag        |
| <i>Isoetes riparia</i>                              | Quillwort                |
| <i>Isotria medeoloides</i>                          | Small Whorled Pogonia    |
| <i>Juncus ambiguus</i>                              | Doubtful Toad-rush       |
| <i>Juncus brachycarpus</i>                          | Short-fruit Rush         |
| <i>Juncus debilis</i>                               | Weak Rush                |
| <i>Juncus ensifolius</i>                            | Ensiform Rush            |
| <i>Juncus marginatus</i> var. <i>biflorus</i>       | Large Grass-leaved Rush  |
| <i>Juncus scirpoides</i>                            | Scirpus-like Rush        |
| <i>Juncus stygius</i> ssp. <i>americanus</i>        | Moor-rush                |
| <i>Juncus subcaudatus</i>                           | Woods-rush               |
| <i>Juniperus horizontalis</i>                       | Prostrate Juniper        |
| <i>Lachnanthes caroliniana</i>                      | Carolina Redroot         |
| <i>Lactuca floridana</i>                            | False Lettuce            |
| <i>Lactuca hirsuta</i>                              | Downy Lettuce            |
| <i>Lathyrus venosus</i>                             | Rough Veiny Vetchling    |
| <i>Lechea pulchella</i> var. <i>moniliformis</i>    | Bead Pinweed             |
| <i>Lemna perpusilla</i>                             | Minute Duckweed          |
| <i>Lemna valdiviana</i>                             | Pale Duckweed            |
| <i>Leucospora multifida</i>                         | Leucospora               |
| <i>Liatris cylindracea</i>                          | Slender Blazing-star     |
| <i>Ligusticum scoticum</i>                          | Scotch Lovage            |
| <i>Lilium michiganense</i>                          | Michigan Lily            |
| <i>Linum medium</i> var. <i>medium</i>              | Wild Flax                |
| <i>Liparis lilifolia</i>                            | Large Twayblade          |
| <i>Lipocarpha micrantha</i>                         | Dwarf Bulrush            |
| <i>Listera auriculata</i>                           | Auricled Twayblade       |
| <i>Listera australis</i>                            | Southern Twayblade       |
| <i>Listera convallarioides</i>                      | Broad-lipped Twayblade   |
| <i>Lithospermum carolinense</i> ssp. <i>croceum</i> | Golden Puccoon           |
| <i>Littorella uniflora</i>                          | American Shore-grass     |

| Species                                  | Common Name                 |
|--|-----------------------------|
| Loiseleuria procumbens                   | Alpine Azalea               |
| Luzula spicata                           | Spiked Woodthrush           |
| Lycopodiella caroliniana                 | Carolina Clubmoss           |
| Lycopodium complanatum                   | Northern Running-pine       |
| Lycopodium sitchense                     | Sitka Clubmoss              |
| Lycopus rubellus                         | Gypsy-wort                  |
| Lygodium palmatum                        | Climbing Fern               |
| Lysimachia hybrida                       | Lance-leaved Loosestrife    |
| Lysimachia quadriflora                   | Four-flowered Loosestrife   |
| Lythrum lineare                          | Saltmarsh Loosestrife       |
| Magnolia virginiana                      | Sweetbay Magnolia           |
| Malaxis bayardii                         | Bayard's Malaxis            |
| Malus glaucescens                        | American Crab               |
| Melanthium virginicum                    | Virginia Bunchflower        |
| Monarda clinopodia                       | Basil-balm                  |
| Myriophyllum pinnatum                    | Green Parrot's-feather      |
| Najas guadalupensis var. muenscheri      | Muenscher's Naiad           |
| Najas guadalupensis var. olivacea        | Southern Naiad              |
| Najas marina                             | Holly-leaved Naiad          |
| Oenothera laciniata                      | Cut-leaved Evening-primrose |
| Oldenlandia uniflora                     | Clustered Bluets            |
| Onosmodium virginianum                   | Virginia False Gromwell     |
| Oryzopsis canadensis                     | Canada Ricegrass            |
| Oxypolis rigidior                        | Stiff Cowbane               |
| Panicum leibergii                        | Leiberg's Panic Grass       |
| Panicum oligosanthos var. oligosanthos   | Few-flowered Panic Grass    |
| Panicum scabriusculum                    | Panic Grass                 |
| Panicum scoparium                        | Velvet Panic Grass          |
| Panicum stipitatum                       | Tall Flat Panic Grass       |
| Panicum wrightianum                      | Wright's Panic Grass        |
| Paspalum laeve var. circulare            | Round Field Beadgrass       |
| Paspalum laeve var. pilosum              | Hairy Field Beadgrass       |
| Paspalum setaceum var. psammophilum      | Slender Beadgrass           |
| Petasites frigidus var. palmatus         | Sweet Coltsfoot             |
| Phlox maculata                           | Wild Sweet-william          |
| Phlox pilosa                             | Downy Phlox                 |
| Physalis pubescens var. integrifolia     | Ground-cherry               |
| Physalis virginiana                      | Virginia Ground-cherry      |
| Physocarpus opulifolius var. intermedius | Ninebark                    |
| Pinus virginiana                         | Virginia Pine               |
| Platanthera ciliaris                     | Orange Fringed Orchis       |
| Platanthera cristata                     | Crested Fringed Orchis      |
| Platanthera hookeri                      | Hooker's Orchid             |
| Platanthera leucophaea                   | Prairie Fringed Orchid      |
| Poa cuspidata                            | Bluegrass                   |
| Poa fernaldiana                          | Fernald Bluegrass           |
| Poa glauca                               | White Bluegrass             |
| Poa interior                             | Inland Bluegrass            |
| Poa paludigena                           | Slender Marsh Bluegrass     |
| Poa sylvestris                           | Woodland Bluegrass          |
| Polygala lutea                           | Yellow Milkwort             |
| Polygonum buxiforme                      | Small's Knotweed            |
| Polygonum erectum                        | Erect Knotweed              |
| Polygonum setaceum var. interjectum      | Swamp Smartweed             |

| Species  | Common Name               |
|--|---------------------------|
| <i>Polymnia uvedalia</i>                               | Bear's-foot               |
| <i>Polystichum lonchitis</i>                           | Northern Holly-fern       |
| <i>Potamogeton diversifolius</i>                       | Water-thread Pondweed     |
| <i>Potamogeton filiformis</i> var. <i>alpinus</i>      | Slender Pondweed          |
| <i>Potamogeton filiformis</i> var. <i>occidentalis</i> | Sheathed Pondweed         |
| <i>Potamogeton ogdenii</i>                             | Ogden's Pondweed          |
| <i>Potamogeton strictifolius</i>                       | Straight-leaf Pondweed    |
| <i>Potentilla paradoxa</i>                             | Bushy Cinquefoil          |
| <i>Prenanthes boottii</i>                              | Boott's Rattlesnake-root  |
| <i>Prenanthes crepidinea</i>                           | Nodding Rattlesnake-root  |
| <i>Prenanthes nana</i>                                 | Dwarf Rattlesnake-root    |
| <i>Prunus pumila</i> var. <i>pumila</i>                | Low Sand-cherry           |
| <i>Ptelea trifoliata</i>                               | Wafer-ash                 |
| <i>Pterospora andromedea</i>                           | Giant Pine-drops          |
| <i>Pycnanthemum clinopodioides</i>                     | Mountain-mint             |
| <i>Pycnanthemum torrei</i>                             | Torrey's Mountain-mint    |
| <i>Pycnanthemum verticillatum</i> var. <i>pilosum</i>  | Whorled Mountain-mint     |
| <i>Pyrola minor</i>                                    | Mountain Pyrola           |
| <i>Pyxidantha barbulata</i>                            | Pixies                    |
| <i>Quercus phellos</i>                                 | Willow Oak                |
| <i>Ranunculus cymbalaria</i>                           | Seaside Crowfoot          |
| <i>Ranunculus hispidus</i> var. <i>nitidus</i>         | Swamp Buttercup           |
| <i>Rhododendron lapponicum</i>                         | Lapland Rosebay           |
| <i>Rhynchospora torreyana</i>                          | Torrey's Beakrush         |
| <i>Rosa acicularis</i> ssp. <i>sayi</i>                | Prickly Rose              |
| <i>Rosa nitida</i>                                     | Shining Rose              |
| <i>Rubus cuneifolius</i>                               | Sand Blackberry           |
| <i>Rudbeckia hirta</i> var. <i>hirta</i>               | Black-eyed-susan          |
| <i>Rumex hastatulus</i>                                | Heart Sorrel              |
| <i>Rumex maritimus</i> var. <i>fueginus</i>            | Golden Dock               |
| <i>Sabatia angularis</i>                               | Rose-pink                 |
| <i>Sabatia campanulata</i>                             | Slender Marsh-pink        |
| <i>Sagina decumbens</i>                                | Small-flowered Pearlwort  |
| <i>Sagittaria Teres</i>                                | Quill-leaf Arrowhead      |
| <i>Salix cordata</i>                                   | Sand Dune Willow          |
| <i>Salix herbacea</i>                                  | Dwarf Willow              |
| <i>Salvia lyrata</i>                                   | Lyre-leaf Sage            |
| <i>Saxifraga oppositifolia</i>                         | Purple Mountain-saxifrage |
| <i>Saxifraga paniculata</i>                            | White Mountain-saxifrage  |
| <i>Schizaea pusilla</i>                                | Curlygrass                |
| <i>Scirpus clintonii</i>                               | Clinton's Clubrush        |
| <i>Scirpus georgianus</i>                              | Georgia Bulrush           |
| <i>Scirpus heterochaetus</i>                           | Slender Bulrush           |
| <i>Scirpus maritimus</i>                               | Seaside Bulrush           |
| <i>Scirpus novae-angliae</i>                           | Saltmarsh Bulrush         |
| <i>Scleria minor</i>                                   | Slender Nutrush           |
| <i>Scleria pauciflora</i> var. <i>caroliniana</i>      | Fewflower Nutrush         |
| <i>Scleria reticularis</i> var. <i>pubescens</i>       | Reticulate Nutrush        |
| <i>Scleria verticillata</i>                            | Low Nutrush               |
| <i>Scutellaria incana</i>                              | Hoary Skullcap            |
| <i>Scutellaria integrifolia</i>                        | Hyssop-skullcap           |
| <i>Sedum integrifolium</i> ssp. <i>leedyi</i>          | Leedy's Roseroot          |
| <i>Sedum rosea</i>                                     | Roseroot                  |
| <i>Sedum telephioides</i>                              | Live-forever              |

| Species   | Common Name                |
|---|----------------------------|
| <i>Sesuvium maritimum</i>                         | Sea Purslane               |
| <i>Sisyrinchium mucronatum</i>                    | Michaux's Blue-eyed-grass  |
| <i>Smilax pseudo-china</i>                        | False China-root           |
| <i>Smilax pulverulenta</i>                        | Jacob's-ladder             |
| <i>Solidago elliotii</i>                          | Coastal Goldenrod          |
| <i>Solidago houghtonii</i>                        | Houghton's Goldenrod       |
| <i>Solidago rugosa</i> ssp. <i>aspera</i>         | Rough Goldenrod            |
| <i>Solidago rugosa</i> var. <i>sphagnophila</i>   | Tall Hairy Goldenrod       |
| <i>Solidago sempervirens</i> var. <i>mexicana</i> | Seaside Goldenrod          |
| <i>Solidago simplex</i> var. <i>racemosa</i>      | Mountain Goldenrod         |
| <i>Sphenopholis obtusata</i> var. <i>obtusata</i> | Prairie Wedgegrass         |
| <i>Sphenopholis pensylvanica</i>                  | Swamp Oats                 |
| <i>Spiraea septentrionalis</i>                    | Mountain Meadowsweet       |
| <i>Spiranthes vernalis</i>                        | Spring Ladies'-tresses     |
| <i>Sporobolus clandestinus</i>                    | Rough Rush-grass           |
| <i>Strophostyles umbellata</i>                    | Pink Wild Bean             |
| <i>Suaeda linearis</i>                            | Narrow-leaf Sea-blite      |
| <i>Suaeda rolandii</i>                            | Roland's Sea-blite         |
| <i>Subularia aquatica</i> var. <i>americana</i>   | Water Awlwort              |
| <i>Thalictrum venulosum</i>                       | Veiny Meadow-rue           |
| <i>Tipularia discolor</i>                         | Crane-fly Orchid           |
| <i>Tofieldia glutinosa</i>                        | Sticky False Asphodel      |
| <i>Trichomanes intricatum</i>                     | Filmy Fern                 |
| <i>Trichostema setaceum</i>                       | Tiny Blue-curls            |
| <i>Trillium flexipes</i>                          | Nodding Trillium           |
| <i>Trillium sessile</i>                           | Toad-shade                 |
| <i>Triphora trianthophora</i>                     | Nodding Pogonia            |
| <i>Trisetum melicoides</i>                        | Melic-oats                 |
| <i>Utricularia inflata</i>                        | Large Floating Bladderwort |
| <i>Uvularia puberula</i> var. <i>nitida</i>       | Mountain Bellwort          |
| <i>Vaccinium cespitosum</i>                       | Dwarf Blueberry            |
| <i>Valeriana uliginosa</i>                        | Marsh Valerian             |
| <i>Valerianella chenopodiifolia</i>               | Goosefoot Corn-salad       |
| <i>Valerianella umbilicata</i>                    | Corn-salad                 |
| <i>Vernonia gigantea</i>                          | Tall Ironweed              |
| <i>Viburnum nudum</i> var. <i>nudum</i>           | Possum-haw                 |
| <i>Viola brittoniana</i> var. <i>brittoniana</i>  | Coastal Violet             |
| <i>Viola hirsutula</i>                            | Southern Wood Violet       |
| <i>Viola nephrophylla</i>                         | Northern Bog Violet        |
| <i>Viola novae-angliae</i>                        | New England Violet         |
| <i>Vitis vulpina</i>                              | Winter Grape               |
| <i>Vittaria appalachiana</i>                      | Appalachian Vittaria       |
| <i>Woodsia alpina</i>                             | Alpine Woodsia             |
| <i>Woodsia glabella</i>                           | Smooth Woodsia             |

(c) The following are threatened native plants that are likely to become endangered within the foreseeable future throughout all or a significant portion of their ranges in the State.

| Species   | Common Name          |
|---|----------------------|
| <i>Aconitum noveboracense</i>                   | Northern Monk's-hood |
| <i>Agalinis paupercula</i> var. <i>borealis</i> | Northern Gerardia    |
| <i>Agastache nepetoides</i>                     | Yellow Giant-hyssop  |

| Species   | Common Name              |
|---|--------------------------|
| <i>Agrimonia rostellata</i>                           | Woodland Agrimony        |
| <i>Agrostis mertensii</i>                             | Northern Bentgrass       |
| <i>Aletris farinosa</i>                               | Stargrass                |
| <i>Allium cernuum</i>                                 | Wild Onion               |
| <i>Arabis missouriensis</i>                           | Green Rock-cress         |
| <i>Arethusa bulbosa</i>                               | Swamp Pink               |
| <i>Asclepias viridiflora</i>                          | Green Milkweed           |
| <i>Asimina triloba</i>                                | Pawpaw                   |
| <i>Asplenium montanum</i>                             | Mountain Spleenwort      |
| <i>Asplenium scolopendrium</i> var. <i>americanum</i> | Hart's-tongue Fern       |
| <i>Aster borealis</i>                                 | Rush Aster               |
| <i>Aster pilosus</i> var. <i>pringlei</i>             | Heath Aster              |
| <i>Aster solidagineus</i>                             | Flax-leaf Whitetop       |
| <i>Aster spectabilis</i>                              | Showy Aster              |
| <i>Aster subulatus</i>                                | Saltmarsh Aster          |
| <i>Betula pumila</i>                                  | Swamp Birch              |
| <i>Bidens laevis</i>                                  | Smooth Bur-marigold      |
| <i>Calamagrostis stricta</i> ssp. <i>inexpansa</i>    | Northern Reedgrass       |
| <i>Callitriche terrestris</i>                         | Terrestrial Starwort     |
| <i>Cardamine longii</i>                               | Long's Bittercress       |
| <i>Carex abscondita</i>                               | Thicket Sedge            |
| <i>Carex backii</i>                                   | Rocky Mountain Sedge     |
| <i>Carex bicknellii</i>                               | Bicknell's Sedge         |
| <i>Carex bigelowii</i>                                | Bigelow's Sedge          |
| <i>Carex buxbaumii</i>                                | Brown Bog Sedge          |
| <i>Carex chordorrhiza</i>                             | Creeping Sedge           |
| <i>Carex crawei</i>                                   | Crawe's Sedge            |
| <i>Carex cumulata</i>                                 | Clustered Sedge          |
| <i>Carex davisii</i>                                  | Davis' Sedge             |
| <i>Carex formosa</i>                                  | Handsome Sedge           |
| <i>Carex hitchcockiana</i>                            | Hitchcock's Sedge        |
| <i>Carex hormathodes</i>                              | Marsh Straw Sedge        |
| <i>Carex houghtoniana</i>                             | Houghton's Sedge         |
| <i>Carex jamesii</i>                                  | Nebraska Sedge           |
| <i>Carex merritt-fernaldii</i>                        | Fernald's Sedge          |
| <i>Carex mitchelliana</i>                             | Mitchell's Sedge         |
| <i>Carex molesta</i>                                  | Troublesome Sedge        |
| <i>Carex sartwellii</i>                               | Sartwell's Sedge         |
| <i>Carex schweinitzii</i>                             | Schweinitz' Sedge        |
| <i>Carex seorsa</i>                                   | Weak Stellate Sedge      |
| <i>Carex typhina</i>                                  | Cat-tail Sedge           |
| <i>Carex willdenowii</i>                              | Willdenow's Sedge        |
| <i>Carya laciniosa</i>                                | Big Shellbark Hickory    |
| <i>Cenchrus tribuloides</i>                           | Dune Sandspur            |
| <i>Ceratophyllum echinatum</i>                        | Prickly Hornwort         |
| <i>Chamaelirium luteum</i>                            | Blazing-star             |
| <i>Chenopodium rubrum</i>                             | Red Pigweed              |
| <i>Corydalis aurea</i>                                | Golden Corydalis         |
| <i>Cyperus lupulinus</i> ssp. <i>lupulinus</i>        | Hop Sedge                |
| <i>Cypripedium arietinum</i>                          | Ram's-head Ladyslipper   |
| <i>Desmodium ciliare</i>                              | Little-leaf Tick-trefoil |
| <i>Diapensia lapponica</i>                            | Diapensia                |
| <i>Digitaria filiformis</i>                           | Slender Crabgrass        |
| <i>Diospyros virginiana</i>                           | Persimmon                |

| Species  | Common Name              |
|--|--------------------------|
| <i>Draba arabisans</i>                                   | Rock-cress               |
| <i>Draba reptans</i>                                     | Carolina Whitlow-grass   |
| <i>Eleocharis equisetoides</i>                           | Knotted Spikerush        |
| <i>Eleocharis halophila</i>                              | Salt-marsh Spikerush     |
| <i>Eleocharis tuberculosa</i>                            | Long-tubercled Spikerush |
| <i>Equisetum pratense</i>                                | Meadow Horsetail         |
| <i>Equisetum palustre</i>                                | Marsh Horsetail          |
| <i>Eupatorium album</i> var. <i>subvenosum</i>           | White Boneset            |
| <i>Eupatorium hyssopifolium</i> var. <i>laciniatum</i>   | Fringed Boneset          |
| <i>Fimbristylis castanea</i>                             | Marsh Fimbry             |
| <i>Frasera caroliniensis</i>                             | Green Gentian            |
| <i>Geranium carolinianum</i> var. <i>sphaerospermum</i>  | Carolina Cranesbill      |
| <i>Geum triflorum</i>                                    | Prairie-smoke            |
| <i>Hedeoma hispidum</i>                                  | Mock-pennyroyal          |
| <i>Helianthemum dumosum</i>                              | Bushy Rockrose           |
| <i>Helianthus angustifolius</i>                          | Swamp Sunflower          |
| <i>Hottonia inflata</i>                                  | Featherfoil              |
| <i>Huperzia appalachiana</i>                             | Appalachian Firmoss      |
| <i>Hydrastis canadensis</i>                              | Golden-seal              |
| <i>Hypericum prolificum</i>                              | Shrubby St. John's Wort  |
| <i>Iris prismatica</i>                                   | Slender Blue Flag        |
| <i>Jeffersonia diphylla</i>                              | Twin-leaf                |
| <i>Juncus trifidus</i>                                   | Arctic Rush              |
| <i>Lechea tenuifolia</i>                                 | Slender Pinweed          |
| <i>Lespedeza stuevei</i>                                 | Velvety Lespedeza        |
| <i>Liatris borealis</i>                                  | Northern Blazing-star    |
| <i>Lilaeopsis chinensis</i>                              | Lilaeopsis               |
| <i>Linum intercursum</i>                                 | Sandplain Wild Flax      |
| <i>Linum medium</i> var. <i>texanum</i>                  | Southern Yellow Flax     |
| <i>Linum sulcatum</i>                                    | Yellow Wild Flax         |
| <i>Ludwigia sphaerocarpa</i>                             | Globe-fruited Ludwigia   |
| <i>Megalodonta beckii</i> var. <i>beckii</i>             | Water-marigold           |
| <i>Minuartia glabra</i>                                  | Appalachian Sandwort     |
| <i>Myriophyllum alterniflorum</i>                        | water milfoil            |
| <i>Myriophyllum farwellii</i>                            | Farwell's Water Milfoil  |
| <i>Oenothera parviflora</i> var. <i>oakesiana</i>        | Evening Primrose         |
| <i>Orontium aquaticum</i>                                | Golden Club              |
| <i>Oxalis violacea</i>                                   | Violet Wood-Sorrel       |
| <i>Panicum flexile</i>                                   | Wiry Panic Grass         |
| <i>Paspalum setaceum</i> var. <i>setaceum</i>            | Slender Beadgrass        |
| <i>Pedicularis lanceolata</i>                            | Swamp Lousewort          |
| <i>Pellaea glabella</i>                                  | Smooth Cliff Brake       |
| <i>Pinguicula vulgaris</i>                               | Butterwort               |
| <i>Plantago cordata</i>                                  | Heartleaf Plantain       |
| <i>Plantago maritima</i> ssp. <i>juncoides</i>           | Seaside Plantain         |
| <i>Podostemum ceratophyllum</i>                          | Riverweed                |
| <i>Polygonum careyi</i>                                  | Carey's Smartweed        |
| <i>Polygonum douglassii</i>                              | Douglas' Knotweed        |
| <i>Polygonum hydropiperoides</i> var. <i>opelousanum</i> | Opelousa Smartweed       |
| <i>Populus heterophylla</i>                              | Swamp Cottonwood         |
| <i>Potamogeton alpinus</i>                               | Northern Pondweed        |
| <i>Potamogeton confervoides</i>                          | Algae-Like Pondweed      |
| <i>Potamogeton hillii</i>                                | Hill's Pondweed          |
| <i>Potamogeton pulcher</i>                               | Spotted Pondweed         |

| Species                                       | Common Name                |
|---|----------------------------|
| Potentilla anserina ssp. egedii               | Silverweed                 |
| Primula mistassinica                          | Bird's-Eye Primrose        |
| Proserpinaca pectinata                        | Comb-Leaved Mermaid-Weed   |
| Prunus pumila var. depressa                   | Dwarf Sand-Cherry          |
| Pycnanthemum muticum                          | Blunt Mountain-Mint        |
| Pycnanthemum verticillatum var. verticillatum | Whorled Mountain-Mint      |
| Pyrola asarifolia                             | Pink Wintergreen           |
| Ranunculus micranthus                         | Small-Flowered Crowfoot    |
| Rhododendron canadense                        | Rhodora                    |
| Rhynchospora inundata                         | Drowned Horned Bush        |
| Rhynchospora nitens                           | Short-Beaked Bald-Rush     |
| Rorippa aquatica                              | Lake-Cress                 |
| Rotala ramosior                               | Tooth-Cup                  |
| Sabatia stellaris                             | Sea-Pink                   |
| Sagittaria calycina var. spongiosa            | Spongy Arrowhead           |
| Salicornia bigelovii                          | Dwarf Glasswort            |
| Salix pyrifolia                               | Balsam Willow              |
| Salix uva-ursi                                | Bearberry Willow           |
| Saxifraga aizoides                            | Yellow Mountain-Saxifrage  |
| Scirpus cespitosus                            | Deer's Hair Sedge          |
| Scleria triglomerata                          | Whip Nutrush               |
| Solidago multiradiata var. arctica            | Alpine Goldenrod           |
| Solidago ohioensis                            | Ohio Golderod              |
| Solidago rigida                               | Stiff-Leaf Goldenrod       |
| Solidago simplex var. randii                  | Mountain Goldenrod         |
| Sparganium nutans                             | Small Bur-Reed             |
| Sporobolus heterolepis                        | Northern Dropseed          |
| Stachys hyssopifolia                          | Rough Hedge-Nettle         |
| Stellaria longipes                            | Starwort                   |
| Triglochin palustre                           | Marsh Arrow-Grass          |
| Tripsacum dactyloides                         | Northern Gamma Grass       |
| Ulmus thomasi                                 | Cork Elm                   |
| Utricularia juncea                            | Rush Bladderwort           |
| Utricularia minor                             | Lesser Bladderwort         |
| Utricularia radiata                           | Small Floating Bladderwort |
| Utricularia striata                           | Bladderwort                |
| Vaccinium boreale                             | High-Mountain Blueberry    |
| Verbesina alternifolia                        | Wingstem                   |
| Veronicastrum virginicum                      | Culver's Root              |
| Viburnum dentatum var. venosum                | Southern Arrowwood         |
| Viburnum edule                                | Squashberry                |
| Viola primulifolia                            | Primrose Violet            |
| Zigadenus elegans ssp. glaucus                | White Camas                |

(d) The following are rare native plants that have from 20 to 35 extant sites or 3,000 to 5,000 individuals statewide.

| Species                | Common Name            |
|------------------------|------------------------|
| Agalinis fasciculata   | Fascicled Gerardia     |
| Bidens bidentoides     | Estuary Beggar-ticks   |
| Carex lupuliformis     | False Hop Sedge        |
| Chamaecyparis thyoides | Atlantic White Cedar   |
| Coreopsis rosea        | Rose Coreopsis         |
| Cyperus schweinitzii   | Schweinitz's Flatsedge |

| <b>Species</b>                                      | <b>Common Name</b>     |
|---|------------------------|
| <i>Drosera filiformis</i>                           | Dewthread              |
| <i>Empetrum nigrum</i> ssp. <i>hermaphroditicum</i> | Black Crowberry        |
| <i>Fuirena pumila</i>                               | Dwarf Umbrella-sedge   |
| <i>Isoetes lacustris</i>                            | Large-spored Quillwort |
| <i>Lechea racemulosa</i>                            | Illinois Pinweed       |
| <i>Lespedeza angustifolia</i>                       | Bush Clover            |
| <i>Lespedeza repens</i>                             | Trailing Lespedeza     |
| <i>Lespedeza violacea</i>                           | Violet Lespedeza       |
| <i>Limosella australis</i>                          | Mudwort                |
| <i>Linum striatum</i>                               | Stiff Yellow Flax      |
| <i>Lobelia nuttallii</i>                            | Nuttall's Lobelia      |
| <i>Mimulus alatus</i>                               | Winged Monkeyflower    |
| <i>Minuartia caroliniana</i>                        | Pine-barren Sandwort   |
| <i>Pinus banksiana</i>                              | Jack Pine              |
| <i>Polemonium vanbruntiae</i>                       | Jacob's-ladder         |
| <i>Polygonum glaucum</i>                            | Seabeach Knotweed      |
| <i>Polygonum tenue</i>                              | Slender Knotweed       |
| <i>Rhynchospora scirpoides</i>                      | Long-beaked Bald-rush  |
| <i>Scheuchzeria palustris</i>                       | Pod Grass              |
| <i>Trollius laxus</i> ssp. <i>laxus</i>             | Spreading Globeflower  |
| <i>Vaccinium uliginosum</i>                         | Bog Bilberry           |

(e) The following are exploitably vulnerable native plants likely to become threatened in the near future throughout all or a significant portion of their ranges within the State if causal factors continue unchecked.

| <b>Species</b>                          | <b>Common Name</b>    |
|---|-----------------------|
| <i>Actaea pachypoda</i>                 | White Baneberry       |
| <i>Actaea spicata</i> ssp. <i>rubra</i> | Red Baneberry         |
| <i>Adiantum pedatum</i>                 | Maidenhair Fern       |
| <i>Arisaema dracontium</i>              | Green Dragon          |
| <i>Asclepias tuberosa</i>               | Butterfly-weed        |
| <i>Asplenium platyneuron</i>            | Ebony Spleenwort      |
| <i>Asplenium rhizophyllum</i>           | Walking Fern          |
| <i>Asplenium ruta-muraria</i>           | Wall-Rue spleenwort   |
| <i>Asplenium trichomanes</i>            | Maidenhair Spleenwort |
| <i>Athyrium filix-femina</i>            | Lady Fern             |
| <i>Azolla caroliniana</i>               | Mosquito-fern         |
| <i>Botrychium dissectum</i>             | Cut-leaf Grape Fern   |
| <i>Botrychium lanceolatum</i>           | Lance-leaf Grape Fern |
| <i>Botrychium matricariifolium</i>      | Matricary Grape Fern  |
| <i>Botrychium multifidum</i>            | Leathery Grape Fern   |
| <i>Botrychium simplex</i>               | Least Moonwort        |
| <i>Botrychium virginianum</i>           | Rattlesnake Fern      |
| <i>Calopogon tuberosus</i>              | Grass Pink            |
| <i>Campanula rotundifolia</i>           | Harebell              |
| <i>Celastrus scandens</i>               | American Bittersweet  |
| <i>Chelone glabra</i>                   | Turtle-heads          |
| <i>Chimaphila maculata</i>              | Spotted Wintergreen   |
| <i>Chimaphila umbellata</i>             | Pipsissewa            |
| <i>Clintonia umbellulata</i>            | Speckled Woodlily     |
| <i>Coeloglossum viride</i>              | Long-bracted Orchid   |
| <i>Conopholis americana</i>             | Squawroot             |
| <i>Corallorhiza maculata</i>            | Spotted Coralroot     |



| Species  | Common Name                |
|--|----------------------------|
| <i>Corallorhiza odontorhiza</i>                      | Autumn Coralroot           |
| <i>Cornus florida</i>                                | Flowering Dogwood          |
| <i>Cryptogramma stelleri</i>                         | Slender Cliff Brake        |
| <i>Cypripedium acaule</i>                            | Pink Ladyslipper           |
| <i>Cypripedium parviflorum</i> var. <i>makasin</i>   | Small Yellow Ladyslipper   |
| <i>Cypripedium parviflorum</i> var. <i>pubescens</i> | Yellow Ladyslipper         |
| <i>Cypripedium reginae</i>                           | Showy Ladyslipper          |
| <i>Cystopteris bulbifera</i>                         | Bulblet Fern               |
| <i>Cystopteris fragilis</i>                          | Common Fragile Fern        |
| <i>Cystopteris tenuis</i>                            | Fragile Fern               |
| <i>Deparia acrostichoides</i>                        | Silvery Spleenwort         |
| <i>Diplazium pycnocarpon</i>                         | Glade Fern                 |
| <i>Drosera intermedia</i>                            | Sundew                     |
| <i>Drosera rotundifolia</i>                          | Sundew                     |
| <i>Dryopteris campyloptera</i>                       | Mountain Wood Fern         |
| <i>Dryopteris carthusiana</i>                        | Spinulose Wood Fern        |
| <i>Dryopteris clintoniana</i>                        | Clinton's Shield Fern      |
| <i>Dryopteris cristata</i>                           | Crested Wood Fern          |
| <i>Dryopteris goldiana</i>                           | Giant Wood Fern            |
| <i>Dryopteris intermedia</i>                         | Common Wood Fern           |
| <i>Dryopteris marginalis</i>                         | Marginal Wood Fern         |
| <i>Epigaea repens</i>                                | Trailing Arbutus           |
| <i>Euonymus obovata</i>                              | Running Strawberry-bush    |
| <i>Galearis spectabilis</i>                          | Showy Orchis               |
| <i>Gentiana andrewsii</i>                            | Closed Gentian             |
| <i>Gentiana clausa</i>                               | Blind Gentian              |
| <i>Gentiana linearis</i>                             | Closed Gentian             |
| <i>Gentianella quinquefolia</i>                      | Stiff Gentian              |
| <i>Gentianopsis crinita</i>                          | Fringed Gentian            |
| <i>Goodyera pubescens</i>                            | Downy Rattlesnake-plantain |
| <i>Goodyera repens</i>                               | Dwarf Rattlesnake-plantain |
| <i>Goodyera tessellata</i>                           | Rattlesnake-plantain       |
| <i>Gymnocarpium dryopteris</i>                       | Oak Fern                   |
| <i>Huperzia lucidula</i>                             | Shining Firmoss            |
| <i>Ilex glabra</i>                                   | Gallberry                  |
| <i>Ilex laevigata</i>                                | Smooth Winterberry         |
| <i>Ilex montana</i>                                  | Mountain Winterberry       |
| <i>Ilex opaca</i>                                    | American Holly             |
| <i>Ilex verticillata</i>                             | Black Alder                |
| <i>Isotria verticillata</i>                          | Large Whorled Pogonia      |
| <i>Juglans cinerea</i>                               | Butternut                  |
| <i>Kalmia angustifolia</i>                           | Sheep Laurel               |
| <i>Kalmia latifolia</i>                              | Mountain Laurel            |
| <i>Kalmia polifolia</i>                              | Bog Laurel                 |
| <i>Lilium canadense</i>                              | Canada Lily                |
| <i>Lilium philadelphicum</i>                         | Woodlily                   |
| <i>Lilium superbum</i>                               | Turk's-cap Lily            |
| <i>Limonium carolinianum</i>                         | Sea Lavender               |
| <i>Liparis loeselii</i>                              | Bog Twayblade              |
| <i>Listera cordata</i>                               | Heartleaf Twayblade        |
| <i>Lobelia cardinalis</i>                            | Cardinal-flower            |
| <i>Lobelia dortmanna</i>                             | Water Lobelia              |
| <i>Lobelia siphilitica</i>                           | Great Lobelia              |
| <i>Lycopodiella alopecuroides</i>                    | Foxtail Clubmoss           |

| Species                             | Common Name                 |
|-------------------------------------|-----------------------------|
| <i>Lycopodiella appressa</i>        | Swamp Clubmoss              |
| <i>Lycopodiella inundata</i>        | Northern Bog Clubmoss       |
| <i>Lycopodium annotinum</i>         | Bristly Clubmoss            |
| <i>Lycopodium clavatum</i>          | Running Cedar               |
| <i>Lycopodium dendroideum</i>       | Northern Tree Clubmoss      |
| <i>Lycopodium digitatum</i>         | Running-pine                |
| <i>Lycopodium obscurum</i>          | Ground Pine                 |
| <i>Lycopodium tristachyum</i>       | Ground Cedar                |
| <i>Malaxis monophyllos</i>          | White Adder's-mouth         |
| <i>Malaxis unifolia</i>             | Green Adder's-mouth         |
| <i>Matteuccia struthiopteris</i>    | Ostrich Fern                |
| <i>Mertensia virginica</i>          | Virginia Bluebells          |
| <i>Monarda didyma</i>               | Bee-balm                    |
| <i>Myrica pensylvanica</i>          | Bayberry                    |
| <i>Ophioglossum pusillum</i>        | Adder's-tongue              |
| <i>Opuntia humifusa</i>             | Eastern Prickly Pear        |
| <i>Osmunda cinnamomea</i>           | Cinnamon Fern               |
| <i>Osmunda claytoniana</i>          | Interrupted Fern            |
| <i>Osmunda regalis</i>              | Royal Fern                  |
| <i>Panax quinquefolius</i>          | Ginseng                     |
| <i>Parnassia glauca</i>             | Grass-of-parnassus          |
| <i>Pellaea atropurpurea</i>         | Purple Cliff Brake          |
| <i>Phegopteris connectilis</i>      | Northern Beech Fern         |
| <i>Phegopteris hexagonoptera</i>    | Broad Beech Fern            |
| <i>Platanthera aquilonis</i>        | Northern Green Orchid       |
| <i>Platanthera blephariglottis</i>  | White Fringed Orchid        |
| <i>Platanthera clavellata</i>       | Green Woodland Orchid       |
| <i>Platanthera dilatata</i>         | Bog-candle                  |
| <i>Platanthera flava</i>            | Tuberclad Orchid            |
| <i>Platanthera grandiflora</i>      | Large Purple Fringed Orchid |
| <i>Platanthera huronensis</i>       | Tall Northern Green Orchid  |
| <i>Platanthera lacera</i>           | Ragged Fringed Orchid       |
| <i>Platanthera obtusata</i>         | Blunt-leaved Orchid         |
| <i>Platanthera orbiculata</i>       | Large Round-leaved Orchid   |
| <i>Platanthera psycodes</i>         | Small Purple Fringed Orchid |
| <i>Pogonia ophioglossoides</i>      | Rose Pogonia                |
| <i>Polypodium virginianum</i>       | Rock Polypody               |
| <i>Polystichum acrostichoides</i>   | Christmas Fern              |
| <i>Polystichum braunii</i>          | Braun's Holly Fern          |
| <i>Rhododendron arborescens</i>     | Smooth Azalea               |
| <i>Rhododendron maximum</i>         | Great Laurel                |
| <i>Rhododendron periclymenoides</i> | Pinkster                    |
| <i>Rhododendron prinophyllum</i>    | Early Azalea                |
| <i>Rhododendron viscosum</i>        | Swamp Azalea                |
| <i>Salvinia minima</i>              | Water-fern                  |
| <i>Sanguinaria canadensis</i>       | Bloodroot                   |
| <i>Sarracenia purpurea</i>          | Pitcher-plant               |
| <i>Silene caroliniana</i>           | Wild Pink                   |
| <i>Spiranthes casei</i>             | Lady's-tresses              |
| <i>Spiranthes cernua</i>            | Nodding Lady's-tresses      |
| <i>Spiranthes lacera</i>            | Slender Lady's-tresses      |
| <i>Spiranthes lucida</i>            | Wide-leaved Lady's-tresses  |
| <i>Spiranthes ochroleuca</i>        | Creamy Lady's-tresses       |
| <i>Spiranthes romanzoffiana</i>     | Hooded Lady's-tresses       |

| <b>Species</b>                    | <b>Common Name</b>    |
|-----------------------------------|-----------------------|
| <i>Spiranthes tuberosa</i>        | Little Lady's-tresses |
| <i>Thelypteris noveboracensis</i> | New York Fern         |
| <i>Thelypteris palustris</i>      | Marsh Fern            |
| <i>Thelypteris simulata</i>       | Massachusetts Fern    |
| <i>Trillium cernuum</i>           | Nodding Trillium      |
| <i>Trillium erectum</i>           | Purple Trillium       |
| <i>Trillium grandiflorum</i>      | White Trillium        |
| <i>Trillium undulatum</i>         | Painted Trillium      |
| <i>Viola pedata</i>               | Bird's-foot Violet    |
| <i>Woodsia ilvensis</i>           | Rusty Woodsia         |
| <i>Woodsia obtusa</i>             | Blunt-lobed Woodsia   |
| <i>Woodwardia areolata</i>        | Netted Chain Fern     |
| <i>Woodwardia virginica</i>       | Virginia Chain Fern   |

## SECTION 6

### OTHER ENVIRONMENTAL ISSUES

#### New York Supplement, March 2010

This section covers the state requirements for Other Environmental Issues and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Agency* - a state or local agency (6 NYCC 450.2) [Added March 2008].
- *A-Weighted Sound Level* - the sound pressure level measured by the use of an instrument with the metering characteristics and A-weighting frequency response prescribed for sound level meters (6 NYCC 450.2) [Added March 2008].
- *Authorized Emergency Vehicle* - every ambulance, police vehicle, fire vehicle, and civil defense emergency vehicle (6 NYCC 450.2) [Added March 2008].
- *Coastal Area* - the state's coastal waters and the adjacent shorelands, as defined in Article 42 of the Executive Law, the specific boundaries of which are shown on the coastal area map on file in the Office of the Secretary of State, as required by Section 914(2) of the Executive Law (6 NYCC 450.2) [Added March 2008].
- *Combination of Vehicles* - any device consisting of a motor vehicle and one or more trailers drawn by such motor vehicle (6 NYCC 450.2) [Added March 2008].
- *Commissioner* - the State Commissioner of Environmental Conservation or such individual's designee (Codes, Rules, and Regulations of the State of New York, Title 6, Part 375, Section 375-1.3 (6 NYCRR 375-1.2)) [Citation Revised March 2008].
- *Commissioner* - the Commissioner of the New York State Department of Environmental Conservation (6 NYCC 450.2) [Added March 2008].
- *dB(A)* - the standard abbreviation for A-weighted sound level in decibels (6 NYCC 450.2) [Added March 2008].
- *Department* - the New York State Department of Environmental Conservation (6 NYCC 450.2) [Added March 2008].
- *Gross Weight* - the weight of a vehicle without load plus the weight of any load thereon (6 NYCC 450.2) [Added March 2008].
- *Lead Agency* - an involved agency principally responsible for undertaking, funding, or approving an action, and therefore responsible for determining whether an environmental impact statement is required in connection with the action, and for the preparation and filing of the statement if one is required (6 NYCC 450.2) [Added March 2008].
- *Motor Vehicle* - every vehicle operated or driven upon a public highway that is propelled by any power other than muscular power, except (a) electrically driven invalid chairs being operated or driven by an invalid, (b) vehicles that run only upon rails or tracks, and (c) snowmobiles as defined in article 47 of the Vehicle and Traffic Law (6 NYCC 450.2) [Added March 2008].

- *Physical Alteration* - includes, but is not limited to, the following activities: vegetation removal, demolition, stockpiling materials, grading and other forms of earthwork, dumping, filling or depositing, discharges to air or water, excavation or trenching, application of pesticides, herbicides, or other chemicals, application of sewage sludge, dredging, flooding, draining or dewatering, paving, construction of buildings, structures or facilities, and extraction, injection or recharge of resources below ground (6 NYCC 450.2) [Added March 2008].
- *Registry* - means the Registry of Inactive Hazardous Waste Disposal Sites as identified in ECL 27-1305 (6 NYCRR 375-1.2) [Citation Revised March 2008].
- *Sound Level* - the quantity in decibels measured by a sound level meter satisfying the requirements of American National Standards Specification for Sound Level Meters, S1.4-1971. This publication is available from the American National Standards Institute, Inc., 1430 Broadway, New York, N.Y. 10018. Sound level is the frequency-weighted sound pressure level obtained with the standardized dynamic characteristic "fast" or "slow" and weighting A, B or C; unless indicated otherwise, the A-weighting is understood (6 NYCC 450.2) [Added March 2008].
- *Vehicle* - every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, except devices moved by human power or used exclusively upon stationary rails or tracks (6 NYCC 450.2) [Added March 2008].

**OTHER ENVIRONMENTAL ISSUES  
GUIDANCE FOR NEW YORK CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

The NEPA Process

Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

Missing Checklist Items O1.2.1.NY.

Process Implementation O1.3.1.NY.

Environmental Noise

Missing Checklist Items O2.2.1.NY.

State-Specific Requirements O2.5.1.NY. through O2.5.3.NY.

CERCLA Cleanup Sites

Missing Checklist Items O3.2.1.NY.

State-Specific Requirements O3.20.1.NY.

Pollution Prevention

Refer to the U.S. TEAM Guide and the DOD Component Supplements for DOD and service-specific requirements.

Missing Checklist Items O4.2.1.NY.

Program Management

Refer to the U.S. TEAM Guide and the DOD Component Supplements for DOD and service-specific requirements.

**GUIDANCE FOR APPENDIX USERS**

**REFER TO APPENDIX NUMBERS:**

**REFER TO APPENDIX TITLES:**

6-1

Leq Equivalent Sound Levels

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Allowable Sound Levels

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Type I Actions

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Type II Actions

| <b>COMPLIANCE CATEGORY:<br/>OTHER ENVIRONMENTAL ISSUES<br/>New York Supplement</b>  |   |
|---|---|
| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>NEPA</b></p> <p><b>O1.2.<br/>Missing Checklist Items</b></p> <p><b>O1.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

| <b>COMPLIANCE CATEGORY:<br/>OTHER ENVIRONMENTAL ISSUES<br/>New York Supplement</b>   |  |
|--|--|
| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>NEPA</b></p> <p><b>01.3.<br/>Process Implementation</b></p> <p><b>01.3.1.NY.</b> No state or local agency involved in an action may undertake, fund, or approve the action until it has complied with the provisions of the SEQR (6 NYCRR 617.3(a) and 617.9(b)(3), (b)(5)(iii)(h), (b)(5)(vi), and (b)(5)(vii)) [Added March 2008; Revised March 2009].</p> | <p>Verify that no state or local agency involved in an action may undertake, fund, or approve the action until it has complied with the provisions of the State Environmental Quality Review Act (SEQR).</p> <p>(NOTE: See Appendix 6-4 for Type I actions (those actions and projects that are more likely to require the preparation of an EIS) and Appendix 6-5 for Type II actions (those actions that have been determined not to have a significant impact on the environment or are otherwise precluded from environmental review under Environmental Conservation Law, article 8).)</p> <p>(NOTE: All draft and final EISs must be preceded by a cover sheet that states the following:</p> <ul style="list-style-type: none"> <li>- whether it is a draft or Final EIS</li> <li>- the name or descriptive title of the action</li> <li>- the location (county and town, village or city) and street address, if applicable, of the action</li> <li>- the name and address of the lead agency and the name and telephone number of a person at the agency who can provide further information</li> <li>- the names of individuals or organizations that prepared any portion of the statement</li> <li>- the date of its acceptance by the lead agency</li> <li>- in the case of a draft EIS, the date by which comments must be submitted.)</li> </ul> <p>(NOTE: If a proposed action is in or involves resources in Nassau or Suffolk Counties, impacts of the proposed action on, and its consistency with, the comprehensive management plan for the special groundwater protection area program must be addressed.)</p> <p>(NOTE: If a proposed state action is in a coastal area, the action's consistency with applicable coastal policies (contained in 19 NYCRR 600.5) must be addressed in the EIS.)</p> <p>(NOTE: An EIS for an action proposed in a heritage area or urban cultural park must address consistency with the approved heritage area or cultural park management plan.)</p> |



| <b>COMPLIANCE CATEGORY:<br/>OTHER ENVIRONMENTAL ISSUES<br/>New York Supplement</b>  |   |
|---|---|
| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <b>ENVIRONMENTAL<br/>NOISE</b><br><br><b>O2.2.<br/>Missing Checklist Items</b><br><br><b>O2.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |



**COMPLIANCE CATEGORY:  
OTHER ENVIRONMENTAL ISSUES  
New York Supplement**

| <b>REGULATORY<br/>REQUIREMENTS:</b> | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
|-------------------------------------|--|
|                                     | <p>pounds (4,536 kg) or less</p> <ul style="list-style-type: none"> <li>- the sound generated by a warning device, such as a horn or siren, installed in a motor vehicle, unless such device is intentionally sounded in order to preclude an otherwise valid noise emission measurement</li> <li>- an authorized emergency vehicle, such as a fire engine, an ambulance, a police van, or a rescue van</li> <li>- special purpose equipment used for the maintenance and construction of public highways, including but not limited to, a snowplow in operation, a motor grader, and a bucket loader</li> <li>- the sound generated by auxiliary equipment that is normally operated only when the motor vehicle on which it is installed is stopped or is operating at a speed of 5 miles per hour (8 kph) or less, unless such device is intentionally operated at speeds greater than 5 mph (8 kph) in order to preclude an otherwise valid noise measurement. Examples of that type of auxiliary equipment include, but are not limited to, cranes, asphalt spreaders, ditch diggers, liquid or slurry pumps, auxiliary air compressors, welders, and trash compactors.)</li> </ul> |

| <b>COMPLIANCE CATEGORY:<br/>OTHER ENVIRONMENTAL ISSUES<br/>New York Supplement</b>  |   |
|---|---|
| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>CERCLA CLEANUP SITES</b></p> <p><b>O3.2.<br/>Missing Checklist Items</b></p> <p><b>O3.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

| <b>COMPLIANCE CATEGORY:</b><br><b>OTHER ENVIRONMENTAL ISSUES</b><br><b>New York Supplement</b>  |   |
|---|---|
| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <b>CERCLA CLEANUP SITES</b><br><br><b>O3.20.</b><br><b>State-Specific Requirements</b><br><br><b>O3.20.1.NY.</b> Facilities must notify the Commissioner prior to altering or changing a site listed in the Registry (6 NYCRR 375-1.6) [Citation Revised March 2008]. | <p>Verify that the Commissioner is notified in writing at least 60 days before the start of physical alteration or construction constituting a substantial change of use of a site listed in the Registry.</p> <p>Verify that notice is also given to the clerks of the county, town, or city (or village) where the site is located.</p> <p>Verify that the notification includes:</p> <ul style="list-style-type: none"> <li>- the identification of the site by Registry number</li> <li>- the identification of the person giving notice</li> <li>- a brief description of the substantial change of use</li> <li>- other information as the Commissioner deems necessary.</li> </ul> |

| <b>COMPLIANCE CATEGORY:</b><br><b>OTHER ENVIRONMENTAL ISSUES</b><br><b>New York Supplement</b>   |   |
|--|---|
| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <b>POLLUTION PREVENTION</b><br><br><b>O4.2.</b><br><b>Missing Checklist Items</b><br><br><b>O4.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

## Appendix 6-1

### Leq Energy Equivalent Sound Levels

(Source: 6 NYCRR 360-1.14(p)) [Citation Revised March 2008]

| Character of Community | Leq Energy Equivalent Sound Levels |                  |
|------------------------|------------------------------------|------------------|
|                        | 7 a.m. - 10 p.m.                   | 10 p.m. - 7 a.m. |
| Rural                  | 57 dB (A)                          | 47 dB (A)        |
| Suburban               | 62 dB (A)                          | 52 dB (A)        |
| Urban                  | 67 dB (A)                          | 57 dB (A)        |

The Leq is the equivalent steady-state sound level that contains the same acoustic energy as the time varying sound level during a 1-h period. It is not necessary that the measurements be taken over a full 1-h time interval, but sufficient measurements must be available to allow a valid extrapolation to a 1-h time interval.

## Appendix 6-2

### Allowable Sound Levels

(Source: New York Vehicle and Traffic Law, Article 10, Section 386)

Maximum Allowable A-Weighted Sound Levels for Vehicles with Maximum Gross Vehicle Weight Greater Than 10,000 lb

| Maximum Speed Limit                 | Sound Levels           |
|-------------------------------------|------------------------|
| 35 mph* or less<br>more than 35 mph | 86 dB (A)<br>90 dB (A) |

Maximum Allowable A-Weighted Sound Levels for Vehicles with Maximum Gross Vehicle Weight Equal To or Less Than 10,000 lb

| Maximum Speed Limit                | Sound Levels           |
|------------------------------------|------------------------|
| 35 mph or less<br>more than 35 mph | 76 dB (A)<br>82 dB (A) |

Maximum Allowable A-Weighted Sound Levels for Motorcycles

| Maximum Speed Limit                | Sound Levels           |
|------------------------------------|------------------------|
| 35 mph or less<br>more than 35 mph | 82 dB (A)<br>86 dB (A) |



### Appendix 6-3

#### Maximum Permissible Sound Level Readings

(Source: New 6 NYCRR 450.3) [Added March 2008; Citation Revised March 2010]

|   | Highway Operations Test |                |                  |                | Stationary Tests |           |
|---|-------------------------|----------------|------------------|----------------|------------------|-----------|
|   | Soft site               |                | Hard site        |                | Soft site        | Hard site |
| If the distance between the microphone location point and the microphone target point is- | 35 mi/hr or less        | Above 35 mi/hr | 35 mi/hr or less | Above 35 mi/hr |                  |           |
| 35 ft. (10.7 m) or more but less than 39 ft. (11.9 m)                                     | 89                      | 93             | 91               | 95             | 89               | 91        |
| 39 ft. (11.9 m) or more but less than 43 ft. (13.1 m)                                     | 88                      | 92             | 90               | 94             | 88               | 90        |
| 43 ft. (13.1 m) or more but less than 48 ft. (14.6 m)                                     | 87                      | 91             | 89               | 93             | 87               | 89        |
| 48 ft. (14.6 m) or more but less than 58 ft. (17.3 m)                                     | 86                      | 90             | 88               | 92             | 86               | 88        |
| 58 ft. (17.3 m) or more but less than 70 ft. (21.3 m)                                     | 85                      | 89             | 87               | 91             | 85               | 87        |
| 70 ft. (21.3 m) or more but less than 83 ft. (25.3 m)                                     | 84                      | 88             | 86               | 90             | 84               | 86        |

\*The speeds shown refer to measurements taken at sites having speed limits as indicated. These speed limits do not necessarily have to be posted.

\*\*Table 1 takes into account both the distance correction factors contained in s 454.2 of this Title and the ground surface correction factors contained in s 454.3 of this Title and may be used in lieu of applying these correction factors to the measured sound level.

## **Appendix 6-4**

### **Type I Actions**

(Source: 6 NYCRR Section 617.4) [Added March 2008]

- (a) The purpose of the list of Type I actions in this section is to identify, for agencies, project sponsors and the public, those actions and projects that are more likely to require the preparation of an EIS than Unlisted actions. All agencies are subject to this Type I list.
  - (1) This Type I list is not exhaustive of those actions that an agency determines may have a significant adverse impact on the environment and requires the preparation of an EIS. However, the fact that an action or project has been listed as a Type I action carries with it the presumption that it is likely to have a significant adverse impact on the environment and may require an EIS. For all individual actions which are Type I or Unlisted, the determination of significance must be made by comparing the impacts which may be reasonable expected to result from the proposed action with the criteria listed in 6 NYCRR 617.7 (c).
  - (2) Agencies may adopt their own lists of additional Type I actions, may adjust the thresholds to make them more inclusive, and may continue to use previously adopted lists of Type I actions to complement those contained in this section. Designation of a Type I action by one involved agency requires coordinated review by all involved agencies. An agency may not designate as Type I any action identified as Type II in 6 NYCRR 617.5.
- (b) The following actions are Type I if they are to be directly undertaken, funded, or approved by an agency:
  - (1) The adoption of a municipality's land use plan, the adoption by any agency of a comprehensive resource management plan, or the initial adoption of a municipality's comprehensive zoning regulations;
  - (2) The adoption of changes in the allowable uses within any zoning district, affecting 25 or more acres of the district;
  - (3) The granting of a zoning change, at the request of an application, for an action that meets or exceeds one or more of the thresholds given elsewhere in this list;
  - (4) The acquisition, sale, lease, annexation, or other transfer of 100 or more contiguous acres of land by a state or local agency;
  - (5) Construction of new residential units that meet or exceed the following thresholds:
    - (i) 10 units in municipalities that have not adopted zoning or subdivision regulations;
    - (ii) 50 units not to be connected (at the commencement of habitation) to existing community or public water and sewerage systems including sewage treatment works;
    - (iii) In a city, town, or village having a population of less than 150,000, 250 units to be connected (at the commencement of habitation) to existing community or public water and sewerage systems including sewage treatment works;
    - (iv) In a city, town, or village having a population of greater than 150,000 but less than 1,000,000, 1,000 units to be connected (at the commencement of habitation) to existing community or public water and sewerage systems including sewage treatment works; or
    - (v) In a city or town having a population of greater than 1,000,000, 2,500 units to be connected (at the commencement of habitation) to existing community or public water and sewerage systems including sewage treatment works;
  - (6) Activities, other than the construction of residential facilities, that meet or exceed any of the following thresholds; or the expansion of existing nonresidential facilities by more than 50 percent of any of the following thresholds:
    - (i) A project or action that involves the physical alteration of 10 acres;

- (ii) A project or action that would use ground or surface water in excess of 2,000,000 gallons per day;
  - (iii) Parking for 1,000 vehicles;
  - (iv) In a city, town, or village having population of 150,000 persons or less, a facility with more than 1000,000 square feet of gross floor area;
  - (v) In a city, town, or village having a population of more than 150,000 persons, a facility with more than 240,000 square feet of gross floor area;
- (7) Any structure exceeding 100 feet above original ground level in a locality without any zoning regulation pertaining to height;
  - (8) Any Unlisted action that includes a nonagricultural use occurring wholly or partially within an agricultural district (certified pursuant to Agriculture and Markets Law, article 25-AA, sections 303 and 304) and exceeds 25 percent of any threshold established in this section;
  - (9) Any Unlisted action (unless the action is designed for the preservation of the facility or site) occurring wholly or partially within, or substantially contiguous to, any historic building, structure, facility, site, or district or prehistoric site that is listed on the National Register of Historic Places, or that has been proposed by the New York State Board on Historic Preservation for a recommendation to the State Historic Preservation officer for nomination for inclusion in the National Register, or that is listed on the State Register of Historic Places (The National Register of Historic Places is established by 36 CFR 60 and 63, 1994);
  - (10) Any Unlisted action, that exceeds 25 percent of any threshold in this section, occurring wholly or partially within or substantially contiguous to any publicly owned or operated parkland, recreation area, or designated open space, including any site on the Register of National Natural Landmarks pursuant to 36 CFR 62, 1994; or
  - (11) Any Unlisted action that exceeds a Type I threshold established by an involved agency pursuant to NYCRR 617.14.

## Appendix 6-5

### Type II Actions

(Source: 6 NYCRR Section 617.5) [Added March 2008]

- (a) Actions or classes of actions identified in subdivision (c) of this section are not subject to review under 6 NYCRR 617. These actions have been determined not to have a significant impact on the environment or are otherwise precluded from environmental review under Environmental Conservation Law, article 8. The actions identified in subdivision (c) of this section apply to all agencies.
- (b) Each agency may adopt its own list of Type II actions to supplement the actions in subdivision (c) of this section. No agency is bound by an action on another agency's Type II list. An agency that identifies an action as not requiring any determination or procedure under 6 NYCRR 617 is not an involved agency. Each of the actions on an agency Type II list must:
  - (1) In no case, have a significant adverse impact on the environment based on the criteria contained in 6 NYCRR 617.7 (c); and
  - (2) Not be a Type I action as defined in 6 NYCRR 617.4.
- (c) The following actions are not subject to review under 6 NYCRR 617:
  - (1) Maintenance or repair involving no substantial changes in an existing structure or facility;
  - (2) Replacement, rehabilitation, or reconstruction of a structure or facility, in kind, on the same site, including upgrading buildings to meet building or fire codes, unless such action meets or exceeds any of the thresholds in 6 NYCRR 617.4;
  - (3) Agricultural farm management practices, including construction, maintenance and repair of farm buildings and structures, and land use changes consistent with generally accepted principles of farming;
  - (4) Repaving of existing highways not involving the addition of new travel lanes;
  - (5) Street openings and right-of-way openings for the purpose of repair or maintenance of existing utility facilities;
  - (6) Maintenance of existing landscaping or natural growth;
  - (7) Construction or expansion of a primary or accessory/appurtenant, nonresidential structure, or facility involving less than 4,000 square feet of gross floor area and not involving a change in zoning or a use variance and consistent with local land use controls, but not radio communication or microwave transmission facilities;
  - (8) Routine activities of educational institutions, including expansion of existing facilities by less than 10,000 square feet of gross floor area and school closing, but not changes in use related to such closings;
  - (9) Construction or expansion of a single-family, a two-family, or a three-family residence on an approved lot including provision of necessary utility connections as provided in paragraph (11) and the installation, maintenance, and/or upgrade of drinking water well and a septic system;
  - (10) Construction, expansion, or placement of minor accessory/appurtenant residential structures, including garages, carports, patios, decks, swimming pools, tennis courts, satellite dishes, fences, barns, storage sheds, or other buildings not changing land use or density;
  - (11) Extension of utility distribution facilities, including gas, electric, telephone, cable, water, and sewer connections to render service in approved subdivisions or in connection with any action on this list;
  - (12) Granting of individual setback and lot line variances;
  - (13) Granting of an area variance(s) for a single-family, two-family, or three-family residence;
  - (14) Public or private best forest management (silvicultural) practices on less than 10 acres of land, but not including waste disposal, land clearing not directly related to forest management, clear-cutting or the application of herbicides or pesticides;
  - (15) Minor temporary uses of land having negligible or no permanent impact on the environment;
  - (16) Installation of traffic control devices on existing streets, roads, and highways;
  - (17) Mapping of existing roads, streets, highways, natural resources, land uses, and ownership patterns;
  - (18) Information collection including basic data collection and research, water quality, and pollution studies, traffic counts, engineering studies, surveys, subsurface investigations, and soils studies that do not commit the agency to undertake, fund, or approve any Type I or Unlisted action;

- (19) Official acts of a ministerial nature involving no exercise of discretion, including building permits and historic preservation permits where issuance is predicated solely on the applicant's compliance or noncompliance with the relevant local building or preservation codes(s);
- (20) Routine or continuing agency administration and management, not including new programs or major reordering of priorities that may affect the environment;
- (21) Conducting concurrent environmental, engineering, economic, feasibility, and other studies and preliminary planning and budgetary processes necessary to the formulation of a proposal for action, provided those activities do not commit the agency to commence, engage in, or approve such action;
- (22) Collective bargaining activities;
- (23) Investments by or on behalf of agencies or pension or retirement systems, or refinancing existing debt;
- (24) Inspections and licensing activities relating to the qualifications of individuals;
- (25) Purchase or sale of furnishings, equipment, or supplies, including surplus government property, other than the following: land, radioactive material, pesticides, herbicides, or other hazardous materials;
- (26) License, lease and permit renewals, or transfers of ownership thereof, where there will be no material change in permit conditions or the scope of permitted activities;
- (27) Adoption of regulations, policies, procedures, and local legislative decisions in connection with any action on this list;
- (28) Engaging in review of any part of an application to determine compliance with technical requirements, provided that no such determination entitles or permits the project sponsor to commence the action unless and until all requirements of 6 NYCRR 617 have been fulfilled;
- (29) Civil or criminal enforcement proceedings, whether administrative or judicial, including a particular course of action specifically required to be undertaken pursuant to a judgment or order, or the exercise of prosecutorial discretion;
- (30) Adoption of a moratorium on land development or construction;
- (31) Interpreting an existing code, rule, or regulation;
- (32) Designation of local landmarks or their inclusion within historic districts;
- (33) Emergency actions that are immediately necessary on a limited and temporary basis for the protection or preservation of life, health, property, or natural resources, provided that such actions are directly related to the emergency and are performed to cause the least change or disturbance, practicable under the circumstances, to the environment; any decision to fund, approve, or directly undertake other activities after the emergency has expired is fully subject to the review procedures of 6 NYCRR 617;
- (34) Actions undertaken, funded, or approved prior to the effective dates set forth in SEQR, except in the case of an action where it is still practicable either to modify the action in such a way as to mitigate potentially adverse environmental impacts, or to choose a feasible or less environmentally damaging alternative, the commissioner may, at the request of any person, or on his own motion, require the preparation of an environmental impact statement; or, in the case of an action where the responsible agency proposed a modification of the action and the modification may result in a significant adverse impact on the environment, and environmental impact statement must be prepared with respect to such modification;
- (35) Actions requiring a certificate of environmental compatibility and public need under articles VII, VIII or X of the Public Service Law and the consideration of, granting or denial of any such certificate;
- (36) Actions subject to the class A or class B regional project jurisdiction of the Adirondack Park Agency or a local government pursuant to section 807, 808, and 809 of the Executive Law, except class B regional projects subject to review by local government pursuant to section 807 of the Executive Law located within the Lake George Park as defined by subdivision one of section 43-0103 of the Environmental Conservation law; and
- (37) Actions of the Legislature and the Governor of the State of New York or of any court, but not actions of local legislative bodies except those local legislative decisions such as rezoning where the local legislative body determines the action will not be entertained.

## SECTION 7

### PESTICIDE MANAGEMENT

#### New York Supplement, March 2010

This section covers the state requirements for Pesticide Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Accident* - an unexpected, undesirable event, caused by the use or presence of a pesticide, that adversely affects humans or the environment (6 NYCRR 325.1) [Citation Revised March 2008; Citation Revised March 2010].
- *Agricultural Animal* - any animal that is raised to produce food, clothing or other saleable commodity, along with large farm animals, including but not limited to: horses, mules and oxen (6 NYCRR 325.1) [Added January 2001; Citation Revised March 2010].
- *Agricultural Commodity* - any plant or part thereof, or animal, or animal product, produced by an individual (including farmers, ranchers, vineyardists, plant propagators, Christmas tree growers, aquaculturists, floriculturists, orchardists, foresters, or other comparable persons) primarily for sale, consumption, propagation or other use by humans or animals (6 NYCRR 325.1) [Added January 2001; Citation Revised March 2010].
- *Aircraft* - any contrivance now known or hereafter invented, used or designed for navigation of, or flight in, the air (6 NYCRR 325.1) [Added January 2001; Citation Revised March 2010].
- *Antimicrobial Agents* -
  1. disinfectants intended to destroy or irreversibly inactivate infectious or other undesirable bacteria, pathogenic fungi, or viruses on surfaces or inanimate objects
  2. sanitizers intended to reduce the number of living bacteria or viable virus particles on inanimate surfaces, in water, or in air
  3. bacteriostats intended to inhibit the growth of bacteria in the presence of moisture
  4. sterilizers intended to destroy viruses and all living bacteria, fungi and their spores, on inanimate surfaces
  5. fungicides and fungistats intended to inhibit the growth of, or destroy, fungi (including yeasts), pathogenic to man or other animals on inanimate surfaces
  6. commodity preservatives and protectants intended to inhibit the growth of, or destroy bacteria in or on raw materials (such as adhesives and plastics) used in manufacturing, or manufactured products (such as fuel, textiles, lubricants, and paints), but not in the pulp and paper process or cooling towers (6 NYCRR 325.1) [Citation Revised March 2010].
- *Anti-siphoning Device* - the use of a backflow prevention device that uses a reduced pressure zone device or an air gap separation between a water source and the overflow of a receptacle (i.e., spray tank, mixing tank, dipping vat, etc.) containing pesticides, to prevent contaminated water from siphoning back into a water supply (6 NYCRR 325.1) [Added January 2001; Citation Revised March 2010].
- *Application of Pesticides* - the placement for effect of a pesticide at or on the location where pest control is desired (6 NYCRR 325.1) [Revised January 2001; Citation Revised March 2010].
- *Basement* - the area below the main floor of a structure that is 5 ft or greater in height, as measured from the floor to the underside of floor joists, and is contained either wholly or in part by a foundation (6 NYCRR 325.1) [Revised January 1998; Citation Revised March 2010].

- *Certification* - The recognition by the Commissioner that a person is competent and thus authorized to use or supervise the use of pesticides (6 NYCRR 325.1) [Citation Revised March 2010].
- *Certified Pesticide Applicator* - a commercial or private pesticide applicator who is certified by the department to use, supervise the use of, or train another individual in the use of any pesticide in any category of use covered by the individual's certification or any individual who is certified to sell restricted use pesticides as described in subdivision 325.16(l) (6 NYCRR 325.1) [Added January 2001; Citation Revised March 2010].
- *Certified Commercial Pesticide Applicator* - a certified applicator who is certified by the department to use or supervise the use of any commercial application of pesticides or to sell or supervise the sale of a restricted use pesticide as described in subdivision 325.16(l) (6 NYCRR 325.1) [Added January 2001; Citation Revised March 2010].
- *Certified Commercial Pesticide Technician* - an individual who is at least 17 years of age and is certified to engage in the following: (6 NYCRR 325.1) [Added January 2001; Citation Revised March 2010].
  1. commercial use of any general use or unclassified pesticide without supervision; or
  2. use of any pesticide when working under the direct supervision of a certified commercial pesticide applicator.
- *Certified Private Pesticide Applicator* - a certified applicator who is at least 17 years old and uses or supervises the private application of restricted use pesticides for purposes of producing any agricultural commodity (6 NYCRR 325.1) [Added January 2001; Citation Revised March 2010].
- *Chemigation* - the application of a chemical via an irrigation system by introducing or injecting the chemical into the water flowing through the system (6 NYCRR 325.1) [Added January 2001; Citation Revised March 2010].
- *Cistern* - a reservoir used for the collection and storage of water, and constructed either wholly or partially underground, including those constructed in a manner that shares part of the foundation in its construction. A stone-filled well with a capacity of less than 60 gal or a septic or sewerage system is not considered a cistern for the purpose of this section (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Commercial Application of Pesticides* - any application of any pesticide except as defined in "private" or "residential" application of pesticides (6 NYCRR 325.1) [Revised January 2001; Citation Revised March 2010].
- *Commercial Pesticide Apprentice* - an individual who has met the requirements enumerated in section 325.10, is at least 16 years of age, and is working under the direct supervision of a certified commercial pesticide applicator (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Commercial Permit* - the permit issued by the commissioner for the distribution, sale, offer for sale, purchase for the purpose of resale, or possession for the purpose of resale, of a restricted pesticide (6 NYCRR 326.1) [Citation Revised March 2010].
- *Commercial Permit Holder* - the person to whom a commercial permit is issued (6 NYCRR 326.1) [Citation Revised March 2010].
- *Commissioner* - the Commissioner of the Department of Environmental Conservation or a designated agents (6 NYCRR 325.1) [Revised January 2001; Citation Revised March 2010].
- *Competent* - properly qualified to perform functions associated with pesticide use (6 NYCRR 325.1) [Revised January 2001; Citation Revised March 2010].
- *Contamination* - the presence of a pesticide or pesticides, in or on areas other than the target area, in quantities which are or may be injurious to human or the environment (6 NYCRR 325.1) [Revised January 2001; Citation Revised March 2010].

- *Crawl space* - the area below the main floor of a structure that is less than 5 ft in height, as measured from the floor to the underside of the floor joists, and is contained either wholly or in part by a foundation (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Department* - the Department of Environmental Conservation (6 NYCRR 325.1) [Citation Revised March 2010].
- *ECL* - the Environmental Conservation Law (6 NYCRR 325.1) [Citation Revised March 2010].
- *Environment* - water, air, land, and all plants and man and other animals living therein, and the inter-relationships that exist among them (6 NYCRR 325.1) [Citation Revised March 2010].
- *Excavation/treated backfill technique* - application of termiticide in the following manner: (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010]
  1. trench and remove soil to be treated onto heavy plastic sheeting or similar material, or into a wheelbarrow or other device which prevents introduction of termiticide to the environment;
  2. treat excavated soil according to the label directions. Mix termiticide dilution thoroughly into the soil in such a manner that termiticide runoff or spillage does not occur; and
  3. after treated soil has completely absorbed the termiticide dilution, replace treated soil in the trench.
- *Dwelling* - any building or structure or portion thereof which is occupied in whole or in part as a home residence or sleeping place for one or two families (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Emergency Pesticide Application* - an unanticipated non-routine application of a pesticide made in response to an imminent threat to human health or property that requires immediate application (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Footing* - a masonry support that underlies a foundation (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Forest* - a concentration of trees and related vegetation, with tree crowns usually interlocking, in non-urban areas sparsely inhabited by and infrequently used by humans; characterized by natural terrain and drainage patterns (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Foundation* - a wall, slab, post, pier, column or pillar that supports a structure (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Fumigant* - any pesticide product that is a vapor or gas, or forms a vapor or gas on application, and whose pesticidal action is through the gaseous state (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *General Use Pesticide* - a pesticide which does not meet the state criteria for a restricted pesticide as established under authority of section 33-0303 of Article 33 of the New York State Environmental Conservation Law (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Ground Equipment* - any machine or device (other than aircraft) for use on land or water, designed for, or adaptable to use in applying a pesticide as a spray, dust, aerosol, or in any other form (6 NYCRR 325.1) [Citation Revised March 2010].
- *Hazard* - a probability that a given pesticide will have an adverse effect on the environment in a given situation, the relative likelihood of danger or ill effect being dependent on a number of interrelated factors present at any given time (6 NYCRR 325.1) [Citation Revised March 2010].



- *Integrated Pest Management (IPM)* - a systematic approach to managing pests which focuses on long-term prevention or suppression with minimal impact on human health, the environment and nontarget organisms. IPM incorporates all reasonable measures to prevent pest problems by properly identifying pests, monitoring population dynamics, and utilizing cultural, physical, biological or chemical pest population control methods to reduce pests to acceptable levels (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Label* - the written, printed or graphic matter on or attached to the pesticide, its immediate container and any outside containers or wrappers (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Labeling* - all labels and other written, printed, or graphic matter: (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010]
  1. upon the pesticide or any of its containers or wrappers;
  2. accompanying the pesticide at any time;
  3. to which reference is made on the label or in literature accompanying the pesticide, except when accurate, non-misleading reference is made to current official publications of the United States Departments of Agriculture or Interior, the United States Public Health Service, state agricultural experiment stations, state colleges of agriculture, or other similar federal institutions or official agencies of this state or other states authorized by law to conduct research in the field of pesticides.
- *Metabolite* - any substance produced in or by living organism by biological processes and derived from a pesticide (6 NYCRR 325.1) [Citation Revised March 2010].
- *Microbial Pesticide* - any pesticide that is classified by the United States Environmental Protection Agency as a microbial pesticide and whose active ingredients consist of living microbial entities capable of survival, growth, reproduction and infection (i.e., bacteria, fungi, viruses and protozoans) (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Nontarget Organism* - a plant or animal other than the one the pesticide is meant to control (6 NYCRR 325.1) [Citation Revised March 2010].
- *Persistence* - the pesticide or its metabolite remains at or near the point of application for more than 1 yr (6 NYCRR 325.1) [Citation Revised March 2010].
- *Person* - any individual, public or private corporation, political subdivision, government agency, department or bureau of the State, municipality, industry, co-partnership, association, firm, trust, estate or any other legal entity whatsoever (6 NYCRR 325.1) [Citation Revised March 2010].
- *Personal Protective Equipment* - apparel and devices worn to protect the body from contact with pesticides or pesticide residues, including: coveralls, chemical-resistant suits, gloves, footwear, aprons and headgear, protective eyewear, and respirators (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Pesticide* - any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects, rodents, fungi, weeds, or other forms of plant or animal life or viruses, except viruses on or in living human or other animals, which the Commissioner shall declare to be a pest and any substance or mixture of substances intended as a plant regulator, defoliant or desiccant (6 NYCRR 325.1) [Revised January 2001; Citation Revised March 2010].
- *Pesticide Use* - performance of the following pesticide-related activities: application; mixing; loading; transport, storage or handling after manufacturer's seal is broken; cleaning of pesticide application equipment; and any required preparation for container disposal (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Plenum Air Space* - any space under a structure that functions as or is designed to function as a channel for air circulated within the structure (6 NYCRR 325.1) [Revised January 1998; Citation Revised March 2010].

- *Private Application of Pesticides* - the application of a restricted use pesticide on property used for the production of an agricultural commodity, such property being owned or rented by the applicator or the applicator's employer or (if applied without compensation other than trading of personal services between producers of agricultural commodities) on the property of another person (6 NYCRR 325.1) [Citation Revised March 2010].
- *Private Applicator* - a certified applicator who uses or supervises the use of restricted use pesticides for purposes of producing any agricultural commodity on property owned or rented by the applicator or the applicator's employer or (if applied without compensation other than trading of personal services between producers of agricultural commodities) on the property of another person. Regulations concerning private application may be found the New York Pesticide Rules and Regulations sections 325.37-325.44. Uncertified applicators can apply to the Department for a special permit to use a particular restricted use pesticide (6 NYCRR 325.1) [Citation Revised March 2010].
- *Private Dwelling* - any building or structure designed and occupied exclusively for residence purposes by not more than two families (6 NYCRR 325.1) [Citation Revised March 2010].
- *Purchase Permit* - the permit to be issued by the commissioner for the purchase, possession, or use of a restricted use pesticide. Whenever used in these protocols, this term also means, as an alternative, a certification identification card (6 NYCRR 326.1) [Citation Revised March 2010].
- *Purchase Permit Holder* - the person to whom a purchase permit is issued (6 NYCRR 326.1) [Citation Revised March 2010].
- *Reduced Pressure Zone Device* - a minimum of two independently active check valves, together with an automatically operated pressure differential relief valve located between the two check valves. During normal flow and at the cessation of normal flow, the pressure between these two check valves must be less than the upstream (supply) pressure. In case of leakage of either check valve, the differential relief valve must operate to maintain the pressure between the check valves at less than the upstream (supply) pressure by discharging to the atmosphere. The unit must include tightly closing shutoff valves located at each end of the device and each device must be fitted with properly located test cocks (6 NYCRR 325.1) [Added January 1998. Citation Revised March 2010].
- *Residential Application of Pesticides* - the application of general use pesticides by ground equipment on property owned or leased by the applicator, excluding any establishments selling or processing food and any residential structure other than the specific dwelling unit in which the applicator resides (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Restricted Use Pesticide* or *Restricted Pesticide* - a pesticide that is classified for restricted use under the provision of article 33 of the Environmental Conservation Law or under section 3(d)(1)(C) of the *FIFRA*, as amended (6 NYCRR 325.1) [Revised January 2001; Citation Revised March 2010].
- *Retreatment* - the reapplication or repeat of an application of a pesticide, whether or not it is the same concentration or formulation as applied initially, to a structure or an area of a structure, provided the application is for the control of the same pest as initially treated (6 NYCRR 326.1) [Added January 1998; Citation Revised March 2010].
- *Rodding* - the subsurface ground application of termiticide by means of the insertion of hollow tubes through which the termiticide is delivered (6 NYCRR 325.1) [Revised January 1998; Citation Revised March 2010].
- *Structure* - any walled and roofed building (6 NYCRR 325.1) [Revised January 1998; Citation Revised March 2010].

- *Subsurface ground application* - the placement of any liquid termiticide below-grade or underneath a slab by rodding, trenching, excavation/treated backfill technique, or other means (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Termiticide* - any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating subterranean termites (6 NYCRR 325.1) [Added January 1998; Citation Revised March 2010].
- *Three-Rinse Technique* - after normal emptying, the container is allowed to drain in a vertical position for 30 s. The container is rinsed three times with water or the pesticide carrier being used, allowed 30 s for draining after each rinse. Rinse material should be easily measurable. Use one quart for each rinse of a 1 gal can or jug, a gallon for each 5-gal can and 5 gal for either 30 or 55 gal drums. Drain each into the spray tank before filling it to the desired level or drain into suitable containers for use as a diluent for future formulation of the same pesticide (6 NYCRR 325.1) [Citation Revised March 2010].
- *Trenching* - the subsurface ground application of termiticide by means of the excavation of a narrow ditch and application of termiticide into the ditch or to the excavated soil as it is being replaced (6 NYCRR 325.1) [Revised January 1998; Citation Revised March 2010].
- *Under the Direct Supervision of* - the act or process in which the application of a pesticide is made by a certified commercial pesticide technician or commercial pesticide apprentice acting under the instruction, control and authorization of a certified commercial applicator employed by the same registered business or agency or an individual acting under the instruction and control of a certified private pesticide applicator who is responsible for the actions of that individual (6 NYCRR 325.1) [Revised January 2001; Citation Revised March 2010].

**PESTICIDE MANAGEMENT  
GUIDANCE FOR NEW YORK CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

|   |                                  |
|---|----------------------------------|
| Missing Checklist Items                 | PM.2.1.NY.                       |
| Pesticide Applicators                   | PM.5.1.NY. through PM.5.6.NY.    |
| Pesticide Application                   |                                  |
| General                                 | PM.10.1.NY. through PM.10.3.NY.  |
| Equipment                               | PM.15.1.NY. and PM.15.2.NY.      |
| Other: Termiticiding                    | PM.35.1.NY. through PM.35.10.NY. |
| Documentation                           | PM.40.1.NY. through PM.40.4.NY.  |
| Storage, Mixing, Preparation Containers | PM.45.1.NY. through PM.45.3.NY.  |
| Disposal                                | PM.55.1.NY. through PM.55.5.NY.  |

**GUIDANCE FOR APPENDIX USERS**

**REFER TO APPENDIX NUMBERS:**

**REFER TO APPENDIX TITLES:**

|     |                                      |
|-----|--------------------------------------|
| 7-1 | Categories of Commercial Applicators |
| 7-2 | Restricted Pesticides                |

| <b>COMPLIANCE CATEGORY:<br/>PESTICIDE MANAGEMENT<br/>New York Supplement</b>   |   |
|--|---|
| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>PM.2.</b></p> <p><b>MISSING CHECKLIST<br/>ITEMS</b></p> <p><b>PM.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

| <b>COMPLIANCE CATEGORY:<br/>PESTICIDE MANAGEMENT<br/>New York Supplement</b>  |   |
|---|---|
| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>PM.5.</b></p> <p><b>PESTICIDE<br/>APPLICATORS</b></p> <p><b>PM.5.1.NY.</b> Individuals engaged in the commercial application of pesticides must possess a commercial applicator's certificate (New York Pesticide Rules and Regulations (6 NYCRR 325.7(a) and (b), 325.17(a), 326.2(a) through (g), and 326.7) [Revised January 1998; Revised January 2001; Citation Revised March 2008; Revised March 2010].</p> | <p>Verify that individuals engaged in the commercial application of pesticides, the private application of restricted use pesticides, or the sale of restricted use pesticides have a commercial applicator's certificate issued by the Commissioner for the appropriate pesticide application category or categories.</p> <p>Verify that the pesticides indicated in Appendix 7-2 are purchased, distributed, sold, used, and possessed only by persons holding a commercial permit, a purchase permit or a certification identification card, as required.</p> <p>(NOTE: Certification is not required for the following individuals</p> <ul style="list-style-type: none"> <li>- a certified commercial technician using general use pesticides</li> <li>- a technician using pesticides under the direct supervision of a certified commercial pesticide applicator</li> <li>- a commercial pesticide apprentice using pesticides under the direct supervision of a certified commercial pesticide applicator</li> <li>- an individual using restricted use pesticides under the direct supervision of a certified private pesticide applicator on agricultural commodities located on property owned or leased by the certified private pesticide applicator or the applicator's employer</li> <li>- an individual using antimicrobial agents, except where such pesticides have been classified as restricted use pesticides or are used in the pulp and paper process or cooling towers</li> <li>- an individual using aquatic pesticides purchased through a purchase permit, n a body of water measuring one acre or less in size which lies exclusively on their property and has little or no outflow to any surface waters of the State</li> <li>- a technician engaged in the application of microbial pesticides by ground equipment in or over any surface waters of the State (such individual must successfully complete a department-approved, 30-hour certification course related to this type of application)</li> <li>- a doctor of veterinary medicine or a veterinary technician working under the veterinarian's direct supervision, licensed to practice within New York State. Such exemption from certification requirements applies only when engaged in the use of general use pesticides: <ul style="list-style-type: none"> <li>- on animals that are in the veterinarian's care within the veterinary facility</li> <li>-on inanimate objects, surfaces, and areas within their veterinary establishments</li> </ul> </li> <li>- an individual engaged in the residential application of pesticides</li> <li>- any person applying 100 percent corn oil to bird eggs as part of any wildlife control activity authorized by the department.)</li> </ul> <p>(NOTE: A purchase permit is required for, but is not limited to, the following: Federal, State, county and municipal officers responsible for pest control;</p> |

| <b>COMPLIANCE CATEGORY:<br/>PESTICIDE MANAGEMENT<br/>New York Supplement</b>   |   |
|--|---|
| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>PM.5.2.NY.</b> Commercial pesticide applicators must have identification (6 NYCRR 325.12) [Revised January 1998; Revised January 2001; Citation Revised March 2008].</p> <p><b>PM.5.3.NY.</b> [Deleted January 2001].</p> <p><b>PM.5.4.NY.</b> Certified pesticide applicators are responsible for protecting employees under their direct supervision (6 NYCRR 325.6) [Revised January 1998; Revised January 1999; Revised January 2001; Citation Revised March 2008].</p> <p><b>PM.5.5.NY.</b> Supervision of noncertified pesticide applicators is subject to specific standards (6 NYCRR 325.7 (d)) [Revised January 1998; Revised January 2001; Citation Revised March 2008;]</p> | <p>registered custom applicators of pesticides; structural pest control operators; and personnel responsible for pest control operation in industrial establishments, golf courses, camps, schools, hospitals correctional facilities, parks, highways or utilities.)</p> <p>Verify that the pesticide applicator has an identification card specifying the categories and subcategories of commercial applicator or technician or private applicator in which the applicator may engage.</p> <p>(NOTE: Identification cards are valid for a period of three years, unless suspended, revoked or otherwise modified by the Department.)</p> <p>[Regulation revised.]</p> <p>Verify that, prior to any pesticide application, the certified pesticide applicator provides safety training to individuals using pesticides under the certified pesticide applicator's direct supervision.</p> <p>Verify that the training includes, but is not limited to, the following topics: site-typical detailed guidance for pesticide use, pesticide safety, use of personal protective equipment including selection of appropriate respirators, and restricted entry intervals.</p> <p>Verify that certified pesticide applicators provide relevant safety information, restricted entry intervals and personal protective equipment and other safety equipment beyond normal work attire, as specified by the pesticide label, to individuals using pesticides under the certified pesticide applicator's direct supervision.</p> <p>(NOTE: If the certified pesticide applicator is not the owner or manager of a registered pesticide business, the owner or manager of the business, agency, or facility must provide such information and equipment.)</p> <p>Verify that on-site direct supervision is provided when technicians:</p> <ul style="list-style-type: none"> <li>- engage in the subsurface ground application of termiticides, the surface application of termiticides to exposed soil in basements and crawl spaces, and the placement of termiticide in voids of masonry foundations</li> <li>- apply fumigants, except when using fumigants classified as general use that are applied to in-place utility poles</li> <li>- apply aquatic pesticides to any surface waters of the State classified pursuant</li> </ul> |

| <b>COMPLIANCE CATEGORY:<br/>PESTICIDE MANAGEMENT<br/>New York Supplement</b> |  |
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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| Revised March 2010].   | <p>to Article 17 of the New York State Environmental Conservation Law, except on-site supervision is not required for permitted applications of microbial pesticides to control aquatic pests as described in paragraph.</p> <p>Verify that on-site direct supervision is provided when an apprentice does any of the following:</p> <ul style="list-style-type: none"> <li>- applies federally restricted use pesticides</li> <li>- applies aquatic pesticides to any surface waters of the State classified pursuant to Article 17 of the New York State Environmental Conservation Law, except on-site supervision is not required when individuals apply aquatic pesticides under the authority of a special purchase permit, as described in section 325.38 of this Part, or apply aquatic pesticides to temporary pools of water which have no outlets</li> <li>- applies pesticides with a label requiring on-site supervision</li> <li>- applies pesticides within or on the premises of licensed day care facilities, elementary and secondary schools and hospitals.</li> </ul> <p>Verify that on-site direct supervision is provided when an individual under the instruction and control of a certified private pesticide applicator applies federally restricted use pesticides.</p> <p>(NOTE: Apprentices shall not apply fumigants except when using fumigants classified as general use that are applied to in-place utility poles, engage in the subsurface ground application of termiticides, the surface application of termiticides to exposed soil in basements and crawl spaces, or the placement of termiticides in voids of masonry foundations, or apply pesticides by aircraft. Individuals under the supervision of certified private pesticide applicators shall not apply fumigants except when using fumigants classified as general use that are applied to in-place utility poles.)</p> <p>Verify that, during pesticide use by an individual under the supervision of a certified private pesticide applicator, a technician, or an apprentice, that requires on-site direct supervision, the certified pesticide applicator is physically present at the application site and within voice contact of the individual being supervised.</p> <p>(NOTE: When a technician uses a fumigant, the application must be made under the direct observation and instruction of the certified applicator, except when using fumigants classified as general use that are applied to in-place utility poles.)</p> <p>Verify that, during pesticide use that allows off-site direct supervision, the certified commercial applicator ensures that the apprentice or technician has a means to contact and is able to contact the supervising certified applicator within a reasonable time not to exceed 30 minutes and that a technician applying pesticides by aircraft maintains radio contact with the certified applicator.</p> <p>(NOTE: A certified commercial pesticide technician may apply aquatic microbial pesticides or general use pesticides without working under the direct supervision of a certified applicator except when using fumigants that require on-site supervision or when using termiticides by subsurface ground application, surface</p> |



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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>PM.5.6.NY.</b> Private pesticide applicators must meet specific requirements (6 NYCRR 325.7(c)) [Added March 2010].</p> | <p>application to exposed soil in basements or crawl spaces, by placement in voids and masonry foundations, or when applying pesticides by aircraft.)</p> <p>Verify that certified private pesticide applicator do not engage in the application of restricted pesticides in other than the category specified on the certified private pesticide applicator's certification or special permit.</p> <p>Verify that certified private pesticide applicator do not commercially apply pesticides.</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <b>PESTICIDE<br/>APPLICATION</b><br><br><b>PM.10.<br/>General</b><br><br><b>PM.10.1.NY.</b> Pesticides must be used in a manner and under wind and other conditions so as to prevent contamination (6 NYCRR 325.2 (a)) [Citation Revised March 2008].<br><br><b>PM.10.2.NY.</b> Pesticides must be used according to specific standards (6 NYCRR 325.2 (b)) [Revised January 2001; Citation Revised March 2008].<br><br><b>PM.10.3.NY.</b> During pesticide use, pesticide labels must be present (6 NYCRR 325.2(d)) [Revised January 2001; Citation Revised March 2008]. | <p>Verify that pesticides are used in a manner and under wind and other conditions so as to prevent contamination of crops, property, structures, lands, pasturage, or waters adjacent to the area of application.</p> <p>Verify that pesticides are used in accordance with the label and labeling directions or as approved by the Department.</p> <p>Verify that, during pesticide use, the certified applicator, certified technician or commercial pesticide apprentice have in their custody a copy of the label for each pesticide being used.</p> <p>Verify that the certified applicator, certified technician or commercial pesticide apprentice make each label available for inspection upon request of the Department.</p> |

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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>PESTICIDE APPLICATION</b></p> <p><b>PM.15. Equipment</b></p> <p><b>PM.15.1.NY.</b> Commercial application equipment and vehicles used for transporting equipment must meet identification standards (6 NYCRR 325.26(a)) [Citation Revised March 2008].</p> <p><b>PM.15.2.NY.</b> Pesticide application equipment must have an effective antisiphon device (6 NYCRR 325.2(c)) [Revised January 1998; Citation Revised March 2008].</p> | <p>Verify that commercial application equipment and vehicles used for transporting that equipment have a set of two numbered stickers for each that are prominently displayed on opposite sides of the equipment or vehicles.</p> <p>(NOTE: This protocol does not apply to small pieces of hand-held or portable equipment such as two and one-half gallon sprayers or back pack mistblowers. Noncommercial type vehicles transporting small quantities of pesticides or portable pesticide equipment are also not required to display the stickers if such display will change the rating of the vehicle and thereby limit its access to certain transportation routes normally used.)</p> <p>Verify that equipment containing pesticides and drawing water from any water source has an effective antisiphon device to prevent backflow.</p> |



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|  | <p>(NOTE: This requirement does not apply if:</p> <ul style="list-style-type: none"> <li>- termiticide is applied as a subsurface ground application within 42 in. of the points along the foundation that are closest to the footing. Points of application must be on the side of the foundation closest to the footing where soil or a masonry element of construction adjoins the foundation. Anything restricting access to the bare masonry foundation targeted for treatment must be removed to expose an area within 42 in. of the points along the foundation that are closest to the footing</li> <li>- the basement or crawl space enclosed by or containing such foundation is ventilated as follows: <ul style="list-style-type: none"> <li>- immediately following application and for at least 7 days thereafter, the area is ventilated directly to the outside of the structure</li> <li>- the minimum net area of ventilating openings is not less than 1 ft<sup>2</sup> for each 150 ft<sup>2</sup> of interior floor surface of the basement or crawl space area</li> <li>- there is at least 4 vents, and each vent is located no farther than 3 ft from each corner.)</li> </ul> </li> </ul> <p>(NOTE: These requirements apply to the application of liquid termiticide.)</p> |
| <p><b>PM.35.3.NY.</b> Pressurized termiticide application equipment must meet specific standards (6 NYCRR 325.3(a)(3)) [Added January 1998; Citation Revised March 2008].</p>          | <p>Verify that all pressurized application equipment used for subsurface ground application of termiticide is equipped with a properly operating pressure gauge that is accurate to within <math>\pm 3</math> psi.</p> <p>Verify that, during applications, pressure at the nozzle does not exceed 25 psi.</p> <p>(NOTE: These requirements apply to the application of liquid termiticide.)</p>   |
| <p><b>PM.35.4.NY.</b> The application of termiticides near water must meet specific standards (6 NYCRR 325.3(a)(5) through (7)) [Added January 1998; Citation Revised March 2008].</p> | <p>Verify that subsurface ground application of termiticide is not made to soil at or below the level of the local water table as determined by either:</p> <ul style="list-style-type: none"> <li>- excavation of a test hole dug down to the lowest planned application area if evidence of a high water table is found, such as water stains or efflorescence on the interior surface of foundation walls, or the presence of a sump pit, sump pump or French drain in the structure to be treated</li> <li>- examination of all sump pits in the structure if they exist.</li> </ul> <p>Verify that, if the excavation method is used, the application of termiticide to soil is not be made unless, at the end of two hours immediately following completion of excavation of the test hole, the test hole does not contain any water or saturated soil.</p> <p>Verify that, if the examination of sump pump pits method is used:</p> <ul style="list-style-type: none"> <li>- any standing water is removed from sump pits, and all sump pumps are removed from sump pits or disconnected from their power source for the</li> </ul>   |

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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>PM.35.5.NY.</b> The application of termiticide near certain air spaces and sources must meet specific standards (6 NYCRR 325.3(a)(9) through (11)) [Added January 1998; Citation Revised March 2008].</p> | <p>next 2 h</p> <ul style="list-style-type: none"> <li>- the application of termiticide to soil is not made unless, at the end of two hours immediately following removal or disconnection of pumps, the sump pits do not contain any water.</li> </ul> <p>Verify that subsurface ground application of termiticide is not made to soil located within 10 ft of a well or cistern as measured across the surface of the soil from the application area to where the well or cistern begins to descend vertically.</p> <p>Verify that subsurface ground application of termiticide is not made under or adjacent to any structure that contains a well or cistern.</p> <p>(NOTE: This well/cistern limitation does not apply if either:</p> <ul style="list-style-type: none"> <li>- soil is removed and treated outside the foundation by the excavation/treated backfill technique, or</li> <li>- if a driven (steel casing) well screened in the water table aquifer has been abandoned in a manner which meets all of the following conditions: <ul style="list-style-type: none"> <li>- all materials are removed from the well (inner casings, pumps, pipes, electrical cable, etc.)</li> <li>- all appurtenant features are disconnected (water supply pipe)</li> </ul> </li> <li>- all of the casing is completely sealed with grout, cement or concrete for its entire length. Removal of the outer steel casing is not necessary.)</li> </ul> <p>Verify that subsurface ground application of termiticide is not made to soil within 4 ft above and beside water pipes that are located between 10 ft and 25 ft from wells or cisterns, as measured across the surface of the soil from the application area to where the well begins to descend vertically.</p> <p>(NOTE: This requirement does not apply if application is limited to the excavation/treated backfill technique.)</p> <p>(NOTE: These requirements apply to the application of liquid termiticide.)</p> <p>Verify that subsurface ground application of termiticide is not made to soil in areas where an air circulation system is to be installed within or beneath a concrete slab or floor.</p> <p>(NOTE: This requirement does not apply if the air circulation system is either:</p> <ul style="list-style-type: none"> <li>- completely encased in concrete</li> <li>- constructed of an impervious material such as metal or plastic that is sealed prior to construction of a concrete slab or floor.)</li> </ul> <p>Verify that subsurface ground application of termiticide is not made to structures that have an air circulation system installed within or beneath a concrete slab or floor.</p> <p>(NOTE: This requirement does not apply if either:</p> <ul style="list-style-type: none"> <li>- all supply and return register outlets throughout the air circulation system are</li> </ul> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>PM.35.6.NY.</b> Termiticide application in crawl spaces must meet specific standards (6 NYCRR 325.3(a)(12) and (13)) [Added January 1998; Citation Revised March 2008].</p> | <p>permanently filled and sealed to completely disable the system</p> <ul style="list-style-type: none"> <li>- application is restricted to soil outside the perimeter of the concrete slab or floor, and application is made from an area outside the perimeter of the concrete slab or floor by vertical rodding, trenching or the excavation/treated backfill technique.)</li> </ul> <p>Verify that subsurface ground application of liquid termiticide is not made to structures with plenum air spaces.</p> <p>(NOTE: This requirement does not apply if the application is restricted to soil outside the foundation, and application is made from an area outside the foundation by vertical rodding, trenching or the excavation/treated backfill technique.)</p> <p>(NOTE: These requirements apply to the application of liquid termiticide.)</p> <p>Verify that subsurface ground application or surface application of termiticide is not made to exposed soil in crawl spaces that are more than 18 in. but less than 5 ft in height, as measured from the floor to the underside of floor joists.</p> <p>Verify that subsurface ground application or surface application of termiticide is not made to exposed soil in crawl spaces that are 18 in. or less in height, as measured from the floor to the underside of floor joists.</p> <p>(NOTE: This requirement does not apply if either:</p> <ul style="list-style-type: none"> <li>- the entire exposed soil surface is covered with a concrete slab immediately following application (except areas where utility access panels are constructed)</li> <li>- the following measures are complied with: <ul style="list-style-type: none"> <li>- the inaccessible crawl space must not connect with other interior areas of the structure without a separating wall or floor. The wall or floor must obstruct movement of termiticide vapor to any non-target areas. The wall or floor must be in place for at least seven days following application. Any access doors in the wall or floor must be securely closed immediately following application</li> <li>- the inaccessible crawl space area is ventilated as follows: <ul style="list-style-type: none"> <li>- immediately following application and for at least 7 days thereafter, the area is ventilated directly to the outside of the structure</li> <li>- the minimum net area of ventilating openings is not less than 1 ft<sup>2</sup> for each 150 ft<sup>2</sup> of interior floor surface of the basement or crawl space area</li> <li>- there is at least 4 vents, and each vent is located no farther than 3 ft from each corner.)</li> </ul> </li> </ul> </li> </ul> <p>(NOTE: These requirements apply to the application of liquid termiticide.)</p> |

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| <p><b>PM.35.7.NY.</b> Subsurface ground termiticide application holes must be properly plugged (6 NYCRR 325.3(a)(14)) [Added January 1998; Citation Revised March 2008].</p>   | <p>Verify that, immediately following subsurface ground application of termiticide, all drill holes are securely plugged with concrete or mortar.</p> <p>Verify that plugs made out of other materials such as plastic, wood or cork are recessed a minimum of 1 in. and capped with concrete or mortar.</p> <p>(NOTE: These requirements apply to the application of liquid termiticide.)</p>   |
| <p><b>PM.35.8.NY.</b> Termiticide retreatment must satisfy specific standards (6 NYCRR 325.3(a)(15)) [Added January 1998; Citation Revised March 2008].</p>  | <p>Verify that retreatment is not made unless there is an active reinfestation of termites subsequent to a prior application as determined by either:</p> <ul style="list-style-type: none"> <li>- the visual observation of live termites, or the sealing, extension or reconstruction of mud tubes after they have been disturbed</li> <li>- there has been a disruption of the termiticide barrier due to construction, excavation, or landscaping.</li> </ul> <p>(NOTE: This requirement applies whether the termiticide used for retreatment is chemically different than the termiticide previously used.)</p> <p>Verify that, when there has been a disruption of the termiticide barrier due to construction, excavation, or landscaping, retreatment is restricted to application of the termiticide to the disrupted area only.</p> <p>(NOTE: These requirements apply to the application of liquid termiticide.)</p>  |
| <p><b>PM.35.9.NY.</b> The control or extermination of aquatic insects, aquatic vegetation, or undesirable fish in any waters of the state must be permitted (6 NYCRR 327.1, 328.1, and 329.1) [Added March 2005; Citation Revised March 2008].</p> | <p>Verify that chemicals are not used for the control or elimination of aquatic vegetation, aquatic insects, or undesirable fish in any waters of the State without having applied for and obtained a written permit.</p> <p>(NOTE: A permit is not required for the use of copper sulfate for the purpose of algae control by a duly constituted water supply agency in its water supply waters; or for chemical control of aquatic vegetation in ponds or lakes having no outlet to other waters and which lie wholly within the boundaries of lands privately owned or leased by the individual making or authorizing such treatment.)</p> <p>(NOTE: A permit is not required for removing undesirable fish by netting, trapping, drawing down of water or any other method not involving the use of chemicals when it is legally authorized by the Department of Environmental Conservation; or for chemical control of fish by the Department of Environmental Conservation on waters completely enclosed by or bordered by lands owned or leased by the department or the State.)</p> <p>(NOTE: A permit is not required for the use of chemicals for controlling biting aquatic insects in temporary ponds or ponds not containing fish and which have no outlet to other waters and lie wholly within the boundaries of lands privately owned or leased by the individual making or authorizing such treatment, provided</p> |



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| <p><b>PM.35.10.NY.</b> The use of chemicals to control or extermination of undesirable fish must meet specific posting and water-use restrictions (6 NYCRR 328.6) [Added March 2010].</p> | <p>the chemicals are restricted to those listed in paragraph (1) of subdivision (a) of section 329.6 and are applied at dosages listed there.)</p> <p>Verify that, if unable or not willing to control access and use of the area, signs are posted to indicate the treatment given.</p> <p>Verify that the following water-use restrictions are met:</p> <ul style="list-style-type: none"> <li>- watering animals are restricted for 2 weeks following treatment</li> <li>- swimming is restricted until the water has become non-toxic to fish or for not less than 2 weeks if the toxicity is dissipated sooner</li> <li>- use as a private water supply is restricted until the water has become non-toxic to fish or for not less than 2 weeks if the toxicity is dissipated sooner</li> </ul> <p>(NOTE: Treatment of a public water supply must be authorized by the supply agency. In this case, restriction is left to the supply agency.)</p> |

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| <b>PESTICIDE<br/>APPLICATION</b><br><br><b>PM.40.<br/>Documentation</b><br><br><b>PM.40.1.NY.</b> Commercial pesticide permit holders must maintain specific records for restricted use pesticides (6 NYCRR 326.3(f)) [Revised January 1998; Citation Revised March 2008].<br><br><b>PM.40.2.NY.</b> Registered businesses and commercial pesticide applicators not employed by a registered business must keep accurate pesticide application records (6 NYCRR 325.25(a) and (c)) [Revised January 1998; Citation Revised March 2008].<br><br><b>PM.40.3.NY.</b> Registered businesses and commercial pesticide applicators not employed by a registered business must file an annual report with the Department (6 NYCRR 325.25(b) and (c)) [Revised January 1998; Citation Revised March 2008].<br><br><b>PM.40.4.NY.</b> Private applicators must maintain records of pesticide use (6 | <p>Verify that commercial permit holders maintain records pertaining to the acquisition, sale, and disposal of restricted pesticides for a period of 2 yr.</p> <p>Verify that records are maintained as required by the commissioner and are made available for inspection by the commissioner.</p> <p>Verify that registered businesses and commercial applicators not employed by a registered business (including, but not limited to, building superintendents and cemetery or golf course employees) keep accurate records that include the following information:</p> <ul style="list-style-type: none"> <li>- the kind and quantity of each pesticide used</li> <li>- dosage rates</li> <li>- methods of application</li> <li>- target organisms</li> <li>- the use, date, and place of application for each pesticide used.</li> </ul> <p>(NOTE: These records must be maintained on an annual basis, retained for a minimum of 3 yr and available for inspection upon request by the Department.)</p> <p>Verify that registered businesses and commercial applicators not employed by a registered business (including, but not limited to, building superintendents and cemetery or golf course employees) file an annual report with the Department that lists the quantity of pesticides used, reported for each product.</p> <p>(NOTE: USEPA registration number must be used as a reference to a product instead of product names.)</p> <p>Verify that private applicators maintain a record on forms provided by the Department of the restricted use pesticides purchased, the crop treated by such,</p> |

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| NYCRR 325.25(d)) [Added January 2001; Citation Revised March 2008].                      | their method of application, and the date of their application or applications.<br><br>Verify that this information is maintained on an annual basis and retained for a minimum of 3 yr, and is available for inspection upon request by the Department. |

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| <p><b>PM.45.</b></p> <p><b>STORAGE/ MIXING/ PREPARATION</b></p> <p><b>PM.45.1.NY.</b> Restricted pesticides and empty restricted pesticide containers must be stored in a manner that will not cause harm to animal or human life or property (6 NYCRR 326.11) [Revised March 2005; Citation Revised March 2008].</p> <p><b>PM.45.2.NY.</b> Pesticide containers must not be sold or used for any purpose that involves the risk of exposure to humans or animals (6 NYCRR 325.5(a)) [Citation Revised March 2008].</p> <p><b>PM.45.3.NY.</b> Pesticide containers can be sold or used for another purpose only with written approval and decontamination (6 NYCRR 325.5(b)) [Revised January 1998; Citation Revised March 2008].</p> | <p>Verify that restricted pesticides are stored in a manner that will not cause harm to animal or human life or property.</p> <p>Verify that empty restricted pesticide containers are stored in a manner that will not cause harm to animal or human life or property.</p> <p>(NOTE: See Appendix 7-2 for a list of New York restricted-use pesticides.)</p> <p>Verify that pesticide containers are not sold or used for any purpose that involves the risk of exposure to humans or animals including but not limited to, the storage of human or animal food or water or the storage of cooking utensils, dishes or clothing.</p> <p>Verify that pesticide containers used for another purpose have been decontaminated and their use has been approved in writing by the Commissioner.</p> |

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| <b>PM.55.</b><br><br><b>DISPOSAL</b><br><br><b>PM.55.1.NY.</b> Empty, noncombustible pesticide containers must be cleaned before disposal using the three-rinse technique (6 NYCRR 325.4(a)) [Revised January 2001; Citation Revised March 2008].<br><br><b>PM.55.2.NY.</b> Empty, noncombustible pesticide containers must be disposed of according to specific procedures (6 NYCRR 325.4(b)) [Revised January 1998; Citation Revised March 2008].<br><br><b>PM.55.3.NY.</b> Empty, combustible pesticide containers must be disposed of according to specific procedures (6 NYCRR 325.4(c)) [Revised January 1998; Citation Revised March 2008].<br><br><b>PM.55.4.NY.</b> Unwanted or unusable pesticides in limited | <p>Verify that empty, noncombustible pesticide containers are cleaned before disposal using the three-rinse technique (see definitions) or by other methods approved by the Department.</p> <p>(NOTE: Containers of ready-to-use pesticides that do not require dilution must be drained only for one 30-s period.)</p> <p>Verify that returnable containers are tightly closed to prevent leakage, the exterior cleaned and the containers returned to the supplier.</p> <p>Verify that empty combustible containers of pesticide are disposed of in one of the following ways:</p> <ul style="list-style-type: none"> <li>- in a sanitary landfill operating in accordance with Department regulations</li> <li>- in a high temperature incinerator approved by the Department</li> <li>- at the site of application, except containers of volatile hormone-type herbicide, if containers are destroyed by the end of the day on which they are empty</li> </ul> <p>(NOTE: Burning must be done in accordance with the Public Health and Environmental Conservation Laws.)</p> <p>Verify that empty containers of volatile hormone-type herbicides are disposed of in one of the following ways:</p> <ul style="list-style-type: none"> <li>- in sanitary landfill operating in accordance with Department regulations</li> <li>- on the property of the applicator in a manner that prevents contamination.</li> </ul> <p>Verify that no more than the following quantities of unwanted/unusable pesticides</p> |

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| <p>quantities may be disposed of by burial (6 NYCRR 325.4(d)(1)) [Revised January 1998; Citation Revised March 2008].</p> <p><b>PM.55.5.NY.</b> Unwanted or unusable pesticides in specific quantities and pesticides whose label prohibits burial must be disposed of according to specific procedures (6 NYCRR 325.4(d)(2)) [Revised January 1998; Citation Revised March 2008].</p> | <p>are disposed of by burial per calendar year:</p> <ul style="list-style-type: none"> <li>- 10 lb of dry material active ingredient</li> <li>- 5 gal of total liquid.</li> </ul> <p>Verify that pesticide wastes are not buried if the label prohibits burial.</p> <p>Verify that burials of unwanted/unusable pesticides have at least 18 in. of compacted cover and are performed in a manner and at a location so that ground or surface water will not be contaminated.</p> <p>Verify that pesticides which are prohibited from being buried are disposed of in one of the following ways:</p> <ul style="list-style-type: none"> <li>- by returning to supplier</li> <li>- by disposal at a hazardous waste facility approved for this use by the Department and the U.S Environmental Protection Agency (USEPA), or for an out-of-state facility, by USEPA and the appropriate State agency</li> <li>- by consignment to a pesticide clean-up day approved by the Department.</li> </ul> |

## Appendix 7-1

### Categories of Commercial Applicators

(6 NYCRR 325.16) [Revised January 2001; Citation Revised March 2008]

#### Agricultural and animal pest control.

- (1) Plant. This subcategory includes commercial applicators using or supervising the use of pesticides, including chemigation, in production of agricultural crops, including but not limited to corn, alfalfa, feed grains, soybeans and forage; vegetables; small fruits; tree fruits and nuts; on grasslands; noncrop agricultural lands; and sod, flowers and shrubs.
- (2) Agricultural Animals. This subcategory includes commercial applicators using or supervising the use of pesticides on animals, including but not limited to, beef cattle, dairy cattle, swine, sheep, horses, goats, poultry and livestock, as well as to places on or in which animals are confined.
- (3) Companion Animals. This subcategory includes commercial applicators using or supervising the use of pesticides on companion animals.
- (4) Fumigation of Soil and Agricultural Commodities. This subcategory includes commercial applicators using or supervising the use of pesticides for soil fumigation in production of agricultural commodities and the use of pesticides for fumigation of agricultural commodities. Certification in this subcategory requires concurrent certification in Subcategory (1), Agricultural Plant Pest Control.

#### Forest pest control.

This category includes commercial applicators using or supervising the use of pesticides to control pests in forests, forest nurseries, forest seed producing areas and forested areas within urban settings.

#### Ornamental and turf pest control.

This category includes commercial applicators using or supervising the use of pesticides to control pests in the maintenance and production of ornamental and shade trees, shrubs, flowers and turf, interior plant maintenance, greenhouses and nurseries, flood control structures, golf courses, outdoor broadcast treatments for fleas, ticks, and other such pests, forest insects or disease control for aesthetic purposes. This category also includes the use of animal repellents on lawns or shrubs. The turf subcategory also includes pre- or post-construction herbicide treatment for driveways, parking lots and other such facilities. This category contains, but is not limited to, the following subcategories:

- (1) ornamentals, shade trees and turf;
- (2) turf; and
- (3) interior plant maintenance.
- (d) Seed treatment.

This category includes commercial applicators using or supervising the use of pesticides on seeds intended for planting on property not owned or leased by the applicator, including seed treaters who apply pesticides to seeds of other individuals and seed plant operators treating seeds before or after sale.

#### Aquatic pest control.

This category includes commercial applicators using or supervising the use of any pesticide purposefully applied to standing or running water, excluding applicators engaged in public health-related activities included in subdivision (h) of this section. This category contains, but is not limited to, the following subcategories:

- (1) Aquatic vegetation control. This subcategory includes control of algae and weeds in swimming pools and in any surface waters of the State classified pursuant to Article 17 of the Environmental Conservation Law.
- (2) Aquatic insect and miscellaneous aquatic organisms control. This subcategory includes the control of aquatic insects such as mosquito and black fly larva and miscellaneous organisms such as mollusks, leeches and snails.
- (3) Aquatic fish control. This subcategory includes treatment to control or eliminate unwanted fish including sea lamprey.
- (4) Aquatic antifouling paints. This subcategory includes application of aquatic antifoulant paints and preservatives.

- (5) Sewer line root control. This subcategory includes the use of pesticides to eliminate tree roots from sewers and other discharge pipes.

#### Rights-of-way pest control.

This category includes commercial applicators using or supervising the use of pesticides in the maintenance of highways, electric power lines, gas or other pipelines, railway rights-of-way and other related facilities such as, but not limited to, the areas around generating stations, substations, pumping stations and associated buildings and in-place applications to utility poles.

- (1) Rights-of-way industrial vegetation control. This subcategory includes commercial applicators using or supervising the use of pesticides in the maintenance of rights-of-way and related facilities.
- (2) Rights-of-way in place pole treatments. This subcategory includes commercial applicators using or supervising the use of pesticides for protecting in-place utility poles, including the use of pole fumigants.

#### Industrial, institutional and structural pest control.

This category includes commercial applicators using or supervising the use of pesticides in, on or around food handling establishments, dwellings, institutions such as schools and hospitals, industrial establishments, including warehouses and grain elevators and any other structures and adjacent areas, public or private; and for the protection of stored, processed or manufactured products. Fumigation may only be performed by individuals certified in the fumigation or food processing subcategories, except for individuals applying general use fumigants to in-place wood poles. Applicators using fumigants in food facilities must be certified in the food processing subcategory. This category contains, but is not limited to, the following subcategories:

- (1) Structural and rodent. This subcategory includes pests, such as but not limited to, rodents, roaches, ants, fleas, ticks and stinging and biting insects within or associated with structures, excluding food processing areas and post construction wood destroying organisms, This subcategory does not include application of termiticides.
- (2) Fumigation. This subcategory includes, but is not limited to,: fumigant use for rodent control in structures; elimination of experimental laboratory rodents; rodent and mole control (fumigation of burrows); pest control in raw food commodity storage, transportation facilities, trucks, railroad cars, vehicles and food processing establishments.
- (3) Termite. This subcategory includes the control of termites.
- (4) Lumber and wood products. This subcategory includes: preserving poles and lumber; pesticide applications at logging decks; and activities associated with construction not covered by other categories.
- (5) Food processing. This subcategory includes commercial pesticide applications to areas other than individual residences, where exposed food or food products are prepared, packaged or held for further distribution or consumption, including the use of fumigants to control appropriate food pests.
- (6) Cooling towers, pulp and paper process. This subcategory includes the use of antimicrobials to control bacteria and other such single cell organisms.
- (7) Other.

#### Public health pest control.

This category includes State, Federal or other governmental personnel, their contractors and other commercial applicators using or supervising the use of pesticides in public health programs for the management and control of pests having medical and public health importance.

#### Regulatory pest control.

This category includes State, federal or other governmental personnel who use, or supervise the use of pesticides in the control of regulated pests, including New York State Department of Agriculture and Markets personnel (veterinarians and horticultural, food and apiary inspectors) and United States Department of Agriculture personnel.

#### Demonstration and research pest control.

Certification in this category requires concurrent certification in a second category of specialty. This category includes, but is not limited to, the following:

- (1) individuals who demonstrate to the public the proper use and techniques of application of pesticides or who supervise such demonstration, including master gardeners, cooperative extension agents, soil and water conservation personnel; and



- (2) individuals conducting or supervising field research with pesticides, including State, federal, university personnel and other individuals conducting field research on or utilizing pesticides.

#### Aerial pest control.

This category includes all pilots engaged in commercial or private aerial pesticide applications. This category is specific to the actual application of pesticides by air and does not include making pesticide recommendations associated with the application.

Aerial applicators providing services associated with pest management, such as making pesticide recommendations, must obtain concurrent certification in the appropriate category.

#### Sales.

This category includes individuals who sell, distribute or supervise the sale or distribution of restricted use pesticides. Such individuals are not authorized to commercially use pesticides without obtaining a second category of specialty.

## Appendix 7-2

### Restricted Pesticides

(6 NYCRR Section 326.2) [Citation Revised March 2008; Citation Revised March 2010]

Restricted pesticides include all those pesticides Federally restricted as well as the additional pesticides listed below. Pesticides from the Federal list that are also listed below are subject to specific restrictions in New York. The following pesticides may be distributed, sold, purchased, possessed, and used only by holders of commercial permits or purchase permits. All concentrations are restricted unless otherwise indicated:

|  |  |
|--|--|
| Acrolein   | Cyclohexamide (Actidione) - concentrations over 1.3 percent  |
| Acrylonitrile  | Daminozide (Alar)  |
| Aluminum phosphide (Phostoxin)   | Dasanit  |
| Antu - concentrations over 29 percent  | Demeton (Systox)   |
| Avitrol  | Dinitrophenol - concentrations above 0.7 percent   |
| Azodrin  | Dinoseb (DNBP) or (DNOSBP)   |
| Bidrin   | Dioxathion (Delnav)  |
| Bomyl  | Diphacinone - concentrations over 3 percent  |
| Brodifacoum (Talon) - concentrations above 0.005 percent   | Di-Syston - concentrations above 2 percent   |
| Bromadiolone (Maki) - concentrations above 0.005 percent   | DNOC   |
| Bromethalin - concentrations above 0.01 percent  | DNOCHP   |
| Carbofuran (Furadan)   | Dyfonate   |
| Carbon disulfide   | Endosulfan (Thiodan)   |
| Carbophenothion (Trithion) - concentrations above 5 percent  | EPN  |
| Chlorofenvinphos (Birlane) - concentrations above 0.5 percent (NOTE: Resin strips such as flea collars, cattle eartags and other impregnated resin products are not restricted.) | Ethion - concentrations above 3 percent and granular formulations above 6 percent  |
| Chlorophacinone (Rozol) - concentrations above 0.05 percent  | Ethoprop (Mocap)   |
| Chloropicrin   | Famphur  |
| Chlorpyrifos - all formulations labeled for termite control by subsurface ground insertion   | Fenamiphos (Nemacur)   |
| Cholecalciferol (Quintox) - concentrations above 0.075 percent   | Fenthion (Baytex) - concentrations above 0.5 percent   |
| Cyanides (calcium and inorganic cyanides, liquid hydrogen cyanide)   | Formetanate hydrochloride (Carazol SP)   |
| Fumarin - concentrations above 3 percent   | Phosdrin   |
| Guthion  | Phosphamidon,  |
| Isofenphos (Oftanol, Amaze) - concentrations above 2 percent   | Phosphorus (white or yellow)   |
| Lethane 384  | Pival - concentrations above 3 percent   |
| Magnesium phosphide  | PMP, Valone - concentrations above 6 percent   |
| Methiocarb (Mesurol) - concentrations above 2 percent  | Randox   |
| Methomyl (Lannate) - concentrations above 1 percent  | Schraden (OMPA)  |
| Methyl bromide   | Strychnine and its salts   |
| Methyl parathion   | Sulfotepp  |
| Mexacarbate (Zectran) - concentrations above 2 percent   | Sulfuryl fluoride (Vikane)   |
| Monitor  | Supracide  |
| Nicotine alkaloid - concentrations above 1 percent   | Terbufos (Counter)   |
| Nicotine salts - concentrations above 40 percent nicotine expressed as alkaloid  | TEPP   |
| Paraquat - concentrations above 0.2 percent  | Vapona - concentrations above 1 percent (NOTE: Resin strips such as flea collars, bird perches and other impregnated resin products are not restricted.) |
| Parathion  | Warfarin - concentrations above 3 percent  |
| Pentachlorophenol - concentrations above 5 percent   |  |
| Permethrin - formulations labeled for termite control by   |  |

|   |   |
|---|---|
| subsurface ground insertion<br>Phorate (Thimet) | Zinc phosphide - concentrations above 2 percent<br>Zinophos |
|---|---|

The following pesticides may be distributed, sold, purchased, possessed, and used only by holders of commercial permits or purchase permits for specific purposes:

- Aldicarb (Temik)
- Inorganic arsenic compounds
- Arsenious oxide
- Calcium arsenate
- Lead arsenate
- Magnesium arsenate; Paris green and other inorganic arsenicals not specifically covered
- Soluble arsenics, including arsenic trioxide (above 1.5 percent), sodium arsenite (above 2 percent), and sodium arsenate (above 5 percent)
- Dicamba (Banvel D)
- Lindane
- Sodium fluoroacetate
- Endrin
- Oxamyl
- Tributyltin.

The following pesticides may not be distributed, sold, purchased, possessed, or used for any purpose:

- Aldrin
- Bandane
- BHC
- Chlordane
- DBCP
- DDD, TDE
- DDT
- Dieldrin
- Heptachlor
- Mercury compounds
- Selenites and selenates
- Silvex
- Strobane
- 2,4,5,-T
- Thallium
- Toxaphene.

The distribution, sale, purchase, possession, or use of aldicarb for use on potatoes in Nassau and Suffolk County is forbidden.

The inground use of oxamyl is permitted in the counties of Nassau and Suffolk on only those lands on which cropping has been restricted by contract with the Department of Agriculture.

## SECTION 8

### PETROLEUM, OIL, AND LUBRICANT (POL) MANAGEMENT

New York Supplement, March 2010

This section covers state requirements for the management of petroleum, oil, and lubricants (POL) and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Aboveground Used Oil Tank* - any stationary device used to store or process used oil, that is designed to contain an accumulation of used oil, which is constructed primarily of nonearthen materials (e.g., wood, concrete, steel, plastic), which provides structural support and is not an underground used oil tank (6 NYCRR 360-14.2).
- *Area of Environmental Value* - an area used for waterfowl nesting and feeding, fish spawning and migration, shellfish beds, or wetlands, or significant habitats as determined by the Department (6 NYCRR 611.2).
- *Chemical Waste* - liquid or semiliquid waste other than waste oil, including, but not limited to, spent solvents, tars, paints, resins, and wastes and sludges from any process (6 NYCRR 225-2.2).
- *Commissioner* - the Commissioner of Environmental Conservation or a duly authorized representative (6 NYCRR 364.1(c)).
- *Container* - any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled (6 NYCRR 360-14.2).
- *Containment or To Contain* - all actions to limit or prevent the spread of a petroleum discharge (6 NYCRR 611.2).
- *Department* - the New York State Department of Environmental Conservation (6 NYCRR 364.1(c)).
- *Discharge* - any intentional or unintentional action or omission resulting in the releasing, spilling, leaking, pumping, pouring, emitting, emptying, or dumping of petroleum into the waters of the state or onto lands from which it might flow or drain into said waters, or into waters outside the jurisdiction of the State when damage may result to the lands, waters, or natural resources within the jurisdiction of the State, excepting discharges pursuant to and in compliance with the conditions of a valid State or Federal permit (6 NYCRR 611.2).
- *Disposal* - the abandonment, discharge, deposit, injection, dumping, spilling, leaking, or placing of any waste or hazardous waste on or into any lands or waters of the state so that such waste or hazardous waste or any related constituent thereof may enter the environment or be emitted into the air or be discharged into any waters, including groundwaters thereof. Disposal also means the thermal destruction of waste or hazardous waste and the burning of such wastes as fuel for the purpose of recovering usable energy (6 NYCRR 364.1(c)).
- *Disposal* - the discharge, deposit, injection, dumping, spilling, leaking or placing of any used oil into or on any land or water so that such used oil or any related constituent thereof may enter the environment or be emitted into the air or discharged into any waters of the state including groundwaters thereof. Disposal shall include the incineration of used oil and the burning of used oil for the purpose of recovering usable energy (Environmental Conservation Law 23-2301) [Added March 2003].
- *Do-It-Yourself Oil Changer* - an individual consumer (noncommercial) who generates used oil by draining the lubricating oil out of his or her own motorized equipment (6 NYCRR 360-14.2).

- *Fuel Oil* - any virgin distillate oil, virgin residual oil, re-refined oil or a blend of these (6 NYCRR 225-2.2).
- *Handbook* - the New York State Water Quality Accident Contingency Plan and Handbook (6 NYCRR 611.3).
- *Lubricating Oil* - all oil suitable for use as a lubricant, or solid for use as a lubricant (6 NYCRR 360-14.2).
- *Major Facility* - includes but is not limited to any refinery, storage or transfer terminal, pipeline, deep water port, drilling platform or any appurtenance related to any of the preceding that is used or is capable of being used to refine, produce, store, handle, transfer, progress or transport petroleum. A vessel shall be considered a major facility only when petroleum is transferred between vessels in the waters of the State of New York. Fueling operations, and the like, between vessels shall not be considered petroleum transfers between vessels for the purpose of this definition. Facilities with total combined above-ground or buried storage capacity of less than 400,000 gal are not major facilities for the purposes of this Part (17 NYCRR 30.2).
- *New Oil* - all oil that has been refined from virgin oil, which may or may not contain additives, but has never been used and does not contain re-refined, reprocessed, or used lubricating oil (6 NYCRR 360-14.2) [Added March 2003; Revised March 2008].
- *On-Premises Oil Changing Operation* - any commercial operation that drains or collects used lubricating oil and replaces it with new or rerefined lubricating oil (6 NYCRR 360-14.2).
- *Petroleum* - any petroleum-based oil of any kind which is liquid at 20 °C under atmospheric pressure and has been refined, rerefined, or otherwise processed for the purpose of being burned as a fuel to produce heat or usable energy, or which is suitable for use as a motor fuel or lubricant in the operation or maintenance of an engine. Waste oil which has been reprocessed or rerefined and which is being stored for sale or use as fuel or lubricant is considered petroleum for purposes of this section (6 NYCRR 612.1).
- *Registered Storage Facility* - one or more stationary tanks, including any associated intra-facility pipelines, fixtures, or other equipment, which have a combined storage capacity of over 1100 gal [~4164 L] of petroleum at the same site. A facility may include ASTs, underground tanks, or a combination of both. Pipelines which enter or leave the site and nonstationary tanks are not part of the facility (6 NYCRR 612.1).
- *Regulated Waste* - a solid waste which is raw sewage, septage, sludge from a sewage or water supply treatment plant, waste oil, or industrial-commercial waste, including hazardous waste (6 NYCRR 364.1(d)(4)).
- *Remote Pump* - any pump separated from the dispenser and which has the discharge line operating under pressure (6 NYCRR 614.14(g)(3)).
- *Reprocessed Oil* - a waste oil from which physical and/or chemical contaminants have been removed so that such oil is suitable for productive sale (6 NYCRR 225-2.2).
- *Reprocessing* - any process, method, or technique, short of rerefining, that removes physical or chemical contaminants from used oil so that such oil can be used productively (6 NYCRR 360-14.2).
- *Rerefined Oil* - any waste oil from which physical and/or chemical contaminants have been removed so that it is substantially equivalent to virgin distillate or virgin residual oil (6 NYCRR 225-2.2).
- *Rerefining* - any process, method, or technique that removes the physical and chemical contaminants from used oil so that such oil is suitable for use as lube stock or fuel oil and, when used by itself or when mixed with new oil or additives, is substantially equivalent or superior to new oil intended for the same purpose, as specified in the American Petroleum Institute's (API) Publication 1509, Engine Service Classification System and Guide to Crankcase Oil Selection (6 NYCRR 360-14.2).

- *Retail Establishment* - every vendor that sells lubricating oil at retail in quantities in excess of one thousand gallons per year (6 NYCRR 374-2.1) [Added March 2003; Citation Revised March 2008].
- *Secondary Containment* - containment that prevents any materials spilled or leaked from reaching the land or water outside the containment area before cleanup occurs (6 NYCRR 612.1).
- *Service Establishment* - any automobile service station, including gas only outlets, or any other retail outlet or boat marina selling at least 500 gal of lubricating oil annually and having an on-premises oil changing operation (6 NYCRR 360-14.2).
- *Spill or Spillage* - any escape of petroleum from the ordinary containers employed in the normal course of storage, transfer, processing, or use. A spill becomes a discharge only when petroleum reaches waters of the State, or lands from which it might flow or drain into said waters (6 NYCRR 611.2).
- *Storage* - the holding of solid waste for a temporary period, at the end of which the solid waste is processed, recovered, disposed of, or stored elsewhere (6 NYCRR 364.1(d)(4)).
- *Tolling Agreement* - a contractual agreement under which used oil is reclaimed and returned by the processor/rerefiner to the generator for use as a lubricant, cutting oil, or coolant (6 NYCRR 360-14.2).
- *Total Halogens* - the total organic and inorganic halides (fluorine, F; chlorine, Cl; bromine, Br; iodine, I), expressed as chloride present in a fuel oil or waste fuel, in parts per million (ppm) by weight (water free basis) (6 NYCRR 225-2.2).
- *Underground Tank* - any tank completely covered with earth or other material. Tanks in subterranean vaults accessible for inspections are considered ASTs for the purpose of this section (6 NYCRR 612.1).
- *Underground Used Oil Tank* - any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of used oil, and is entirely covered by earth or other material. This term does not include any storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor (6 NYCRR 360-14.2).
- *Used Engine Lubricating Oil* - petroleum-based lubricating oil from internal combustion engines and/or from vehicle transmissions that, through use, has been contaminated by physical or chemical impurities (6 NYCRR 360-14.2).
- *Used Engine Lubricating Oil Retention Facility* - any facility employed to store used engine lubricating oil by a service establishment or other government facility that generates at least 500 gal of used oil annually, or accepts used oil from do-it-yourselfers (6 NYCRR 360-14.2).
- *Used Oil* - any oil that has been refined from crude oil, or any synthetic oil, that has been used; and, as a result of such use, is contaminated by physical or chemical impurities. Used oil is separated into two distinct waste categories based on its chemical characteristics (6 NYCRR 360-14.2):
  1. on-specification used oil - a used oil with properties which do not exceed any of the specification levels found in Appendix 8-2
  2. off-specification used oil - used oil with chemical properties which exceed any of the specification levels listed in Appendix 8-2
  3. used oil containing more than 1000 ppm of total halogens is presumed to be a hazardous waste as listed in 6 NYCRR 371.4 (see HAZARDOUS WASTE MANAGEMENT). Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste
    - a. the rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins if they are processed, through a tolling agreement, to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if they are recycled in any other manner, or disposed

- b. the rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units whose CFCs are destined for reclamation. However, the rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units
  - 4. used oil containing 50 ppm by weight, or greater, of polychlorinated biphenyls (PCBs) is a hazardous waste as defined in 6 NYCRR 371.4(e) (see HAZARDOUS WASTE MANAGEMENT), unless exempted under Parts 370 through 374 and 376 of 6 NYCRR
  - 5. materials defined as used oil under 6 NYCRR 374-2.2 (see HAZARDOUS WASTE MANAGEMENT) are also subject to regulation as used oil.
- *Used Oil* - any oil that has been refined from crude oil, or any synthetic oil, that has been used, and as a result of such use, is contaminated by physical or chemical impurities (6 NYCRR 360-14.2) [Added March 2003; Revised March 2008].
  - *Used Oil Processing Facility* - chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived product. Processing includes, but is not limited to, blending used oil with virgin petroleum products, blending used oils to meet the fuel specification, filtration, simple distillation, chemical or physical separation, reprocessing, and rerefining (6 NYCRR 360-14.2):
    - 1. generators who perform the following activities are not processors provided that the used oil is generated onsite and is not being sent offsite to a burner of on-specification or off-specification used oil fuel:
      - a. filtering, cleaning, or otherwise reconditioning used oil before returning it for reuse by the generator
      - b. separating used oil from wastewater generated onsite to make the wastewater acceptable for discharge or reuse pursuant to section 402 or section 307(b) of the *Clean Water Act* or other applicable Federal or state regulations governing the management or discharge of wastewaters
      - c. using oil mist collectors to remove small droplets of used oil from in-plant air to make plant air suitable for continued recirculation
      - d. draining or otherwise removing used oil from materials containing or otherwise contaminated with used oil in order to remove excessive oil to the extent possible pursuant to 6 NYCRR 374-2.2(a)(3), management of hazardous waste
      - e. filtering, separating, or otherwise reconditioning used oil before burning it in a space heater pursuant to 6 NYCRR 374-2.4(b)(1)(ii)([c])
    - 2. transporters that conduct incidental processing operations that occur during the normal course of used oil transportation (e.g., settling and water separation), but that are not designed to produce (or make more amenable for production of) used oil derived products, are not processors
    - 3. burners that conduct incidental processing operations that occur during the normal course of used oil management prior to burning as provided in 6 NYCRR 374-2.4(b)(2) are not processors.
  - *Used Oil Storage Facility* - any facility, other than used engine lubricating oil retention facilities located at the point of generation, that stores used oil, including, but not limited to, storage facilities for used oil transfer stations or used oil processing facilities (6 NYCRR 360-14.2).
  - *Used Oil Transfer Facility* - any transportation related facility including loading docks, parking area, storage areas, and other areas where shipments of used oil are held for more than 24 h and not longer than 35 days during the normal course of transportation (6 NYCRR 360-14.2).
  - *Waste Fuel* - either of the following to be burned singly, together, or in combination with fuel oil (6 NYCRR 225-2.2):
    - 1. waste fuel A
    - 2. waste fuel B.
  - *Waste Fuel A* - any waste oil, fuel oil, or mixture of these to be burned which contains between 25 and 250 ppm (by weight) lead and which meets the limitations found in Appendix 8-1 and does not contain chemical waste (6 NYCRR 225-2.2).

- *Waste Fuel B* - any fuel to be burned that does not meet the limitations of Appendix 8-1 and/or contains chemical waste (6 NYCRR 225-2.2).
- *Waste Oil* - used and/or reprocessed engine lubricating oil and/or any other used oil, including, but not limited to, fuel oil, engine oil, gear oil, cutting oil, transmission fluid, hydraulic fluid, dielectric fluid, oil storage tank residue, animal oil, and vegetable oil, which has been contaminated by physical or chemical impurities, through use or accident, and has not subsequently been re-refined (6 NYCRR 225-2.2 and 360-14.2).



| PETROLEUM, OIL, AND LUBRICANT (POL) MANAGEMENT<br>GUIDANCE FOR NEW YORK CHECKLIST USERS |                                 |
|---|---------------------------------|
| REFER TO CHECKLIST ITEMS:   |                                 |
| Missing Checklist Items   | PO.2.1.NY.                      |
| Discharges/Spills   | PO.15.1.NY. through PO.15.3.NY. |
| POL Storage Areas   | PO.20.1.NY. through PO.20.3.NY. |
| Pipelines   | [Deleted]                       |
| POL Loading and Unloading   | [Moved]                         |
| Used Oil  | PO.60.1.NY. through PO.60.6.NY. |
| Used Oil Generators   | PO.65.1.NY. and PO.65.2.NY.     |
| Used Oil Transportation   | PO.75.1.NY.                     |
| Used Oil Burners  | PO.80.1.NY. and PO.80.2.NY.     |
| Used Oil Processors/ Re-Refiners  | PO.87.1.NY.                     |
| State-Specific Used Oil Requirements  | PO.95.1.NY.                     |

| GUIDANCE FOR APPENDIX USERS |  |
|-----------------------------|--|
| REFER TO APPENDIX NUMBERS:  | REFER TO APPENDIX TITLES:  |
| 8-1                         | Fuel Constituents/Property   |
| 8-2                         | Specification Levels Which Apply Only to Used Oil<br>When Burned for Energy Recovery |
| 8-3                         | Applicability of Standards for the Management of Used<br>Oil                         |

| <b>COMPLIANCE CATEGORY:</b><br><b>PETROLEUM, OIL, AND LUBRICANT (POL) MANAGEMENT</b><br><b>New York Supplement</b>   |   |
|--|---|
| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>PO.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>PO.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

| <b>COMPLIANCE CATEGORY:</b><br><b>PETROLEUM, OIL, AND LUBRICANT (POL) MANAGEMENT</b><br><b>New York Supplement</b>  |   |
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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>PO.15</b></p> <p><b>DISCHARGES/SPILLS</b></p> <p><b>PO.15.1.NY.</b> Following discovery of petroleum discharge specific steps must be taken for containment and environmental protection (6 NYCRR 611.3, 611.4, and 611.5) [Revised March 2007; Citation Revised March 2008].</p> <p><b>PO.15.2.NY.</b> Facilities must take specific cleanup and removal steps following a discharge of petroleum (6 NYCRR 611.6) [Citation Revised March 2008; Revised March 2010].</p> | <p>(NOTE: Appendix D of the New York SARA Title III and the Chemical Emergency Preparedness Programs State Implementation Memorandum states the following: Oil releases in excess of 1000 gallons which have reached surface water or have the potential for reaching surface waters must be reported.)</p> <p>Verify that containment is initiated immediately after discovery of a discharge.</p> <p>Verify that all containment procedures follow the guidelines contained in chapter 200 of the New York State Water Quality Accident Contingency Plan and Handbook (the Handbook).</p> <p>Verify that deployment of booms, physical barriers, or other equipment specifically for protection of an area of environmental value occurs in addition to deployment of booms, physical barriers, or other equipment to protect human life, health, or safety.</p> <p>Verify that, unless written permission has previously been granted, no chemical is used at a discharge site without approval from the Department representative at the site.</p> <p>Verify that all cleanup and removal procedures follow the guidelines contained in Chapter 300 of the Handbook of the New York State Water Quality Accident Contingency Plan and Handbook (see section 6 NYCRR 611.7).</p> <p>Verify that the primary cleanup and removal procedure is mechanical removal of the discharge for recycling as soon as possible.</p> <p>Verify that the secondary cleanup and removal procedure is use of sorbents, preferably of small size, recoverable by mechanical means, of minimum toxicity toward flora and fauna, and, in decreasing order of preference, recyclable, burnable without releasing poisonous fumes, or biodegradable.</p> <p>Verify that the use of sorbents is limited to small discharges and final cleanup of large discharges.</p> <p>Verify that disposal of recovered petroleum products and oil-soaked debris occurs only if recycling is not feasible:</p> <ul style="list-style-type: none"> <li>- recovered petroleum products are disposed of using one of the following methods, listed in order of decreasing environmental desirability: <ul style="list-style-type: none"> <li>- recycling as soon as possible</li> <li>- incineration at high temperatures with adequate emission control</li> </ul> </li> </ul> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>PO.15.3.NY.</b> [Deleted March 2005].</p>  | <ul style="list-style-type: none"> <li>equipment</li> <li>- land burial, if the recovered petroleum product is containerized and placed in an approved land burial site</li> <li>- oil-soaked debris is disposed of using one of the following methods, listed in order of decreasing environmental desirability:               <ul style="list-style-type: none"> <li>- recycling as soon as possible</li> <li>- incineration at high temperatures with adequate emission control equipment</li> <li>- natural degradation on impermeable land</li> <li>- land burial in an approved site</li> <li>- sanitary landfill</li> <li>- onsite incineration with prior approval.</li> </ul> </li> </ul> <p>(NOTE: See ST.4.5.NY. for registered petroleum storage facility spill reporting.)</p> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>PO.20</b></p> <p><b>POL STORAGE AREAS</b></p> <p><b>PO.20.1.NY.</b> Certain petroleum storage facilities must register with the Department (6 NYCRR 612.1(b) and 612.2) [Revised March 2005; Citation Revised March 2008; Revised March 2010].</p> | <p>(NOTE: This requirement is repeated in ST.4.1.NY. See applicable requirements in Storage Tank Management for additional requirements.)</p> <p>(NOTE: This requirement applies to all petroleum storage facilities with a combined storage capacity over 1100 gal except the following:</p> <ul style="list-style-type: none"> <li>- oil production facilities</li> <li>- facilities licensed under article 12 of the Navigation Law</li> <li>- facilities regulated under the Federal Natural Gas Act.)</li> </ul> <p>Verify that all petroleum storage facilities having a combined capacity of over 1100 gal are registered with the Department, including any out-of -service facility that has not been permanently closed.</p> <p>Verify that a new petroleum storage facility is registered with the Department prior to being placed in service.</p> <p>Verify that, if ownership of the facility changes, the new owner reregisters the facility with the department within 30 days of ownership transfer.</p> <p>Verify that registration is renewed every 5 yr from the date of the last valid registration until the Department receives written notice that the AST/UST has been permanently closed or that ownership of the AST/UST has been transferred.</p> <p>Verify that, within 30 days prior to substantially modifying a storage facility, the facility notifies the Department of such modification on forms supplied by the Department.</p> <p>Verify that a registration certificate that is current and valid is displayed on the premises at all times.</p> <p>(NOTE: Any existing facility registered under 612 must comply with the requirements of Part 613, handling and storage of petroleum. Any new facility or modification to an existing facility registered under this Part must comply with the requirements of Part 614, standards for new and substantially modified petroleum storage facilities. Only the portion of the facility being modified must be brought into compliance with Part 614.)</p> <p>(NOTE: See ST.4.4.NY. for transfer requirements.)</p> |
| <p><b>PO.20.2.NY.</b> [Moved March 2005].</p>  | <p>(NOTE: Moved to ST.4.6.NY., March 2005].</p>   |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>PO.20.3.NY.</b> Major facilities must have a valid license issued by the Department (17 NYCRR 30.3 and 30.8(a)) [Citation Revised March 2008].</p> | <p>(NOTE: Onshore major facilities must obtain a letter of certification from the Department as a precondition for obtaining a license from the Department of Transportation.)</p> <p>Verify that the installation has a valid license.</p> <p>Verify that the installation submits to the Commissioner a monthly report that includes the following information:</p> <ul style="list-style-type: none"> <li>- the total number of barrels of petroleum transferred to the licensee's major facility during the previous month</li> <li>- the total number of barrels of petroleum transferred during the previous month that had previously been transferred and subject to fee imposition.</li> </ul> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b> |
| <b>PO.40</b><br><br><b>PIPELINES</b><br><br><b>PO.40.1.NY.</b> [Deleted March 2003].                               | (NOTE: Misstated requirements.)              |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <b>PO.55</b><br><br><b>POL LOADING AND UNLOADING</b><br><br><b>PO.55.1.NY.</b> [Moved March 2003].<br><br><b>PO.55.2.NY.</b> [Moved March 2003].<br><br><b>PO.55.3.NY.</b> [Moved March 2003].<br><br><b>PO.55.4.NY.</b> [Moved March 2003]. | <br><br><br>(NOTE: Requirements applied to ASTs and USTs.)<br><br><br>(NOTE: Requirements applied to ASTs and USTs.)<br><br><br>(NOTE: Requirements applied to ASTs and USTs.)<br><br><br>(NOTE: Requirements applied to ASTs.) |



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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>PO.60</b></p> <p><b>USED OIL</b></p> <p><b>PO.60.1.NY.</b> Facilities must comply with specific restrictions regarding the use and disposal of used oil (6 NYCRR 374-2.2 (a)(1) and (c) and 374-2.9(c)) [Revised March 2008; Revised March 2010].</p> <p><b>PO.60.2.NY.</b> Used oil collection centers and transfer facilities must obtain a permit and USEPA identification number (6 NYCRR 360-14.1 (b), 14.3(a) and (c)) [Revised March 2008; Revised March 2010].</p> | <p>(NOTE: See Appendix 8-3 for applicability and exemptions.)</p> <p>Verify that used oil is not managed in surface impoundments, pits, ponds, lagoons, or waste piles.</p> <p>Verify that used oil is not used as a dust suppressant, land applied, or disposed of directly on the land.</p> <p>Verify that used oil that is recyclable or reusable is not disposed of through the use of absorbent materials, other than for purposes of spill cleanup.</p> <p>Verify that off-specification used oil fuel that is burned for energy recovery only uses the following devices:</p> <ul style="list-style-type: none"> <li>- industrial furnace</li> <li>- industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products</li> <li>- utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale</li> <li>- used oil-fired space heaters provided that the burner meets the provisions of subdivision 374-2.3(d) of this Subpart</li> <li>- hazardous waste incinerators.</li> </ul> <p>(NOTE: The department presumes that used oil is to be recycled or burned for energy recovery unless a used oil handler disposes of used oil, or sends used oil for disposal.)</p> <p>Verify that an owner or operator of a used oil collection center or transfer facility obtains a permit to construct and operate:</p> <p>Verify that the following information is provided in applying for a permit:</p> <ul style="list-style-type: none"> <li>- a copy of the facility's EPA notification and identification number</li> <li>- an engineering report</li> <li>- a quality control plan</li> <li>- a contingency plan</li> <li>- a closure plan</li> <li>- a draft operations and maintenance manual</li> <li>- a description of the used oil tracking system to be used at the facility.</li> </ul> <p>(NOTE: The following operations and facilities that manage used oil are exempt from this checklist item:</p> |

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| <p><b>PO.60.3.NY.</b> Used oil transfer, storage, or processing facilities must meet specific design requirements (6 NYCRR 374-2.5(f)(2) and (3)) [Revised March 2008].</p> | <ul style="list-style-type: none"> <li>- used oil burner facilities (other than used oil fired space heater facilities)</li> <li>- used oil generator facilities, including used engine lubricating oil retention facilities (see PO.65.1.NY.)</li> <li>- used oil aggregation points owned by the generator</li> <li>- do-it-yourselfer (DIY) used oil collection centers</li> <li>- facilities that manage only on-specification used oil fuel that is to be burned for energy recovery. Facilities managing used oil prior to declaring it on-specification do not qualify for this exemption for any activities performed upon the oil prior to the declaration. However, this exemption applies to activities performed upon the oil subsequent to an on-specification determination</li> <li>- used oil fired space heater facilities</li> <li>- the transfer of used oil from vehicle to vehicle, other than at a used oil facility provided the following requirements are met:               <ul style="list-style-type: none"> <li>- transfer operations are continuously observed</li> <li>- a contingency plan is in place in case of an emergency during transfer</li> <li>- the transporters meet all applicable requirements of Part 364 (see PO.95.1.NY.)</li> <li>- procedures are established to identify and manage of materials suspected or determined to be hazardous waste</li> <li>- facilities storing beyond 24 hours must also comply with the facility standards of 40 CFR 279, Subpart E,</li> <li>- used oil must be stored for 35 days or less, from receipt</li> </ul> </li> <li>- the storage of used oil by a transporter for a period of 10 calendar days or less, is exempt provided that no transfer, pumping or consolidation of loads occurs. Facilities storing beyond 24 hours must also comply with the facility standards of 40 CFR 279, Subpart E)</li> </ul> <p>(NOTE: See Appendix 8-3 for applicability and exemptions.)</p> <p>Verify that storage facilities are designed, constructed, and operated in accordance with one of the following requirements in effect for the municipality in which the facility is located:</p> <ul style="list-style-type: none"> <li>- New York State Uniform Fire Prevention and Building Code, including National Fire Protection Association (NFPA) Flammable and Combustible Liquids Code (NFPA-30)</li> <li>- local building and fire codes.</li> </ul> <p>Verify that aboveground used oil tanks with less than 10 percent volume beneath the surface of the ground meet the following secondary containment requirements:</p> <ul style="list-style-type: none"> <li>- the secondary containment system minimally consists of dikes, berms, or retaining walls; a floor; and an equivalent secondary containment system</li> <li>- the entire containment system, including walls and floors, is sufficiently impervious to prevent any used oil released into the system from migrating out to the soil, groundwater, or surface water.</li> </ul> |

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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>   |
| <p><b>PO.60.4.NY.</b> Used oil transfer, storage, or processing facilities must meet specific container requirements (6 NYCRR 374-2.5(f)(4) and (5)) [Revised March 2008].</p>                    | <p>Verify that aboveground used oil tanks with 10 percent or more volume beneath the surface of the ground and underground used oil tanks also meet the applicable requirements contained in 40 CFR 280 (see TEAM Guide Section 10, STORAGE TANK MANAGEMENT), whether or not the used oil exhibits any characteristics of hazardous waste.</p> <p>(NOTE: See Appendix 8-3 for applicability and exemptions.)</p> <p>Verify that containers used to store used oil meet the following criteria:</p> <ul style="list-style-type: none"> <li>- in good condition (no severe rusting, apparent structural defects or deterioration)</li> <li>- not leaking (no visible leaks).</li> </ul> <p>Verify that containers used to store oil are equipped with a secondary containment system consisting of, minimally, the following elements:</p> <ul style="list-style-type: none"> <li>- dikes, berms, or retaining walls</li> <li>- a floor</li> <li>- an equivalent secondary containment system.</li> </ul> <p>Verify that the entire containment system, including walls and floors, is sufficiently impervious to prevent any used oil released into the system from migrating to the soil, groundwater, or surface water.</p> |
| <p><b>PO.60.5.NY.</b> Used oil transfer, storage, or processing facilities must meet specific operating requirements (6 NYCRR 374.2.2(b)(2) and 374-2.5(f)(6)) [Citation Revised March 2008].</p> | <p>(NOTE: See Appendix 8-3 for applicability and exemptions.)</p> <p>Verify that used oil is considered off-specification (see definitions) unless analysis or other information indicates otherwise.</p> <p>Verify that all containers, aboveground used oil tanks, and fill pipes of underground used oil tanks display a label indicating the capacity of the tank and clearly stating USED OIL.</p>  |
| <p><b>PO.60.6.NY.</b> Used oil collection centers and transfer facilities must meet specific reporting requirements (6 NYCRR 360-14.3(d)) [Revised March 2008].</p>                               | <p>Verify that the owner or operator of a used oil collection center or transfer facility prepares an annual report on a form prescribed by or acceptable to the department.</p> <p>Verify the annual report is sent to the department's central office and to the department office in the Region in which the facility is located, no later than March 1 of the calendar year following each year of operation.</p> <p>Verify that the report includes the following information:</p> <ul style="list-style-type: none"> <li>- facility name, address, EPA identification number, contact person, phone</li> </ul>   |

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|  | <ul style="list-style-type: none"> <li>number and location</li> <li>- a listing of each storage tank and its capacity</li> <li>- a monthly summary of all incoming and outgoing loads since the last report</li> <li>- if, since the last report, any chemical analysis was performed on the used oil received by the facility for the purpose of checking on-site screening for total halogens, a tabulation of the data from any such analysis and the associated total halogen screening data</li> <li>- a description of any spills or emergencies that occurred at the facility since the last report and corrective actions taken in response to such spills or emergencies</li> <li>- a list of any unacceptable used oil that was rejected or received by the facility since the last report and how it was handled</li> <li>- a description of any past changes since the last report or anticipated future changes to the facility.</li> </ul> |

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| <p><b>PO.65</b></p> <p><b>USED OIL GENERATORS</b></p> <p><b>PO.65.1.NY.</b> Used oil generators must meet all Spill Prevention, Control and Countermeasures (SPCC) requirements (6 NYCRR 374-2.3(c)) [Citation Revised March 2008].</p> <p><b>PO.65.2.NY.</b> Every service establishment and retail establishment must have a used oil retention facility (6 NYCRR 374-2.3(f)) [Added March 2003; Revised March 2008].</p> | <p>(NOTE: See Appendix 8-3 for applicability and exemptions.)</p> <p>Verify that generators meet the SPCC requirements found in 40 CFR Part 112 (see PO.5).</p> <p>(NOTE: See Appendix 8-3 for applicability and exemptions.)</p> <p>NOTE: A service establishment is any automobile service station, including gas only outlets, or any other retail outlet and boat marina, selling at least 500 gallons of lubricating oil annually and having an on-premises oil changing operation. A retail establishment is every vendor that sells lubricating oil at retail in quantities in excess of 1,000 gallons per year.)</p> <p>Verify that every service establishment accepts, at no charge, used petroleum-based or synthetic lubricating oil in quantities not to exceed 5 gallons per day from any household do-it-yourselfer, in accordance with the following requirements:</p> <ul style="list-style-type: none"> <li>- the service establishment maintains a tank or container with sufficient capacity to provide adequate service to individuals, for the temporary storage of used oil</li> <li>- if filled to capacity, the service establishment proceeds expeditiously to have the used oil emptied by an authorized used oil transporter and informs individuals when used oil can be brought back to the establishment for collection</li> <li>- the service establishment accepts used oil only during the normal business hours of the establishment</li> <li>- the service establishment does not impose a separate charge or fee upon any individual for acceptance or disposal of used oil, whether or not the individual is a customer for service</li> <li>- the service establishment conspicuously posts a sign in a location which is always open to public view, stating: "WE ACCEPT USED OIL FOR RECYCLING AT NO CHARGE".</li> </ul> <p>(NOTE: The service establishment may require used oil to be dropped off in rigid screw-top closed containers and may refuse to accept used oil if it has been contaminated through other than ordinary and normal use.)</p> <p>(NOTE: Retail establishments may either directly accept used petroleum-based or</p> |

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|  | <p>synthetic lubricating oil from household do-it-yourselfers, or contract with another retail establishment, service establishment or municipality, for the collection of used oil brought to it for acceptance.)</p> <p>Verify that retail establishments which elect to provide for the direct collection of used oil accept, at no charge, used petroleum-based or synthetic lubricating oil in quantities not to exceed five gallons per day from any household do-it-yourselfer, in accordance with the following requirements:</p> <ul style="list-style-type: none"> <li>- the retail establishment maintains a tank or container with sufficient capacity to provide adequate service to individuals, for the temporary storage of used oil</li> <li>- if filled to capacity, the retail establishment proceeds expeditiously to have the used oil emptied by an authorized used oil transporter and informs individuals when used oil can be brought back to the establishment for collection</li> <li>- the retail establishment accepts used oil only during the normal business hours of the establishment</li> <li>- the retail establishment does not impose a separate charge or fee upon any individual for acceptance or disposal of used oil, whether or not the individual is a customer for service</li> <li>- the retail establishment conspicuously posts a sign in a location which is always open to public view, stating: "WE ACCEPT USED OIL FOR RECYCLING AT NO CHARGE".</li> </ul> <p>Verify that retail establishments which elect not to provide for direct collection of used oil meet the following requirements:</p> <ul style="list-style-type: none"> <li>- enter into a contract with another retail establishment, service establishment or municipality <ul style="list-style-type: none"> <li>- in counties or cities with a population of one million or more, the distance between the contracting retail establishment and the contractor does not exceed eight miles</li> <li>- in all other areas, the contracting retail establishment and the contractor are within the same town or city or within adjacent towns or cities</li> </ul> </li> <li>- obtain a hardship waiver from the department for inability to comply with this subdivision due to prohibition by local codes, ordinances, or State or federal statute or regulation, or due to the impossibility of installing a used oil tank or container because of physical constraints.</li> </ul> |

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| <p><b>PO.75</b></p> <p><b>USED OIL TRANSPORTATION</b></p> <p><b>PO.75.1.NY.</b> Shipments of used oil must meet specific requirements (6 NYCRR 374-2.3(e)) [Citation Revised March 2008].</p> | <p>(NOTE: See Appendix 8-3 for applicability and exemptions.)</p> <p>Verify that the used oil is transported only by transporters who are permitted and have a USEPA identification number.</p> <p>(NOTE: Generators can transport used oil generated onsite to a used oil collection center provided:</p> <ul style="list-style-type: none"> <li>- the generator transports the used oil in a vehicle owned by the generator or owned by an employee of the generator</li> <li>- the generator transports no more than 55 gal of used oil at any time</li> <li>- the generator transports the used oil to a used oil collection center that is permitted or authorized to manage used oil.)</li> </ul> <p>(NOTE: Generators may arrange for used oil to be transported by a transporter without a USEPA identification number if the used oil is reclaimed under a tolling agreement.)</p> |

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| <p><b>PO.80</b></p> <p><b>USED OIL BURNERS</b></p> <p><b>PO.80.1.NY.</b> The construction, modification, or operation of an air contamination source in which waste fuel is to be burned must have valid permits and/or certificates (6 NYCRR 225-2.3 through 225-2.5).</p> <p><b>PO.80.2.NY.</b> Facilities must meet specific requirements when selling, delivering, or exchanging in trade waste fuel (6 NYCRR 225-2.6 and 225-2.7).</p> | <p>Verify that the facility has a valid permit to construct or modify an air contamination source in which waste fuel is to be burned.</p> <p>Verify that the facility has a valid certificate to operate before burning waste fuel in an air contamination source.</p> <p>(NOTE: A facility may burn waste oil in the following emission sources without a permit or certificate if the following apply:</p> <ul style="list-style-type: none"> <li>- a space heater located in automotive service facilities where the following conditions are met: <ul style="list-style-type: none"> <li>- the maximum operating heat input if less than 1 MBtu/h</li> <li>- the waste oil is generated onsite</li> </ul> </li> <li>- mobile emission source where the waste oil is generated in the same emission source.)</li> </ul> <p>Verify that the facility only sells, delivers, or exchanges in trade waste fuel to facilities with valid certificates to operate an emission source burning waste fuel or to a permitted transporter of waste fuel.</p> <p>Verify that, if delivering waste fuel A to a facility which burns the fuel, analyses are performed or procedures adopted to assure the fuel meets the standards outlined in Appendix 8-1.</p> <p>Verify that records of the identification and quantity of all waste fuel delivered are kept by the supplier for 3 yr and reported to the facility planning to burn the fuel.</p> <p>Verify that these records are made available to the Commissioner or his representatives during normal business hours.</p> <p>Verify that sampling and analysis of the waste fuel samples are carried out in accordance with methods acceptable to the Commissioner.</p> |



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| <p><b>PO.87</b></p> <p><b>USED OIL PROCESSORS/ RE-REFINERS</b></p> <p><b>PO.87.1.NY.</b> Used oil processors/ re-refiners must obtain a permit to construct and operate (6 NYCRR 374-2.6(a) and (c)) [Added March 2008].</p> | <p>(NOTE: Processing means chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived products. Processing includes, but is not limited to: blending used oil with virgin petroleum products, blending used oils to meet the fuel specification, filtration, simple distillation, chemical or physical separation and re-refining.)</p> <p>Verify that used oil processor/re-refiner obtain a Part 360 permit for the construction and operation of the facility.</p> <p>Verify that the following information is provided in applying for a permit:</p> <ul style="list-style-type: none"> <li>- a copy of the facility's EPA notification and identification number</li> <li>- an engineering report</li> <li>- a quality control plan</li> <li>- a contingency plan</li> <li>- a closure plan</li> <li>- a draft operations and maintenance manual</li> <li>- a description of the used oil tracking system to be used at the facility.</li> </ul> |

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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>PO.95</b></p> <p><b>STATE-SPECIFIC USED OIL REQUIREMENTS</b></p> <p><b>PO.95.1.NY.</b> Any person collecting, removing, transporting, or delivering to a treatment, storage, or disposal facility any waste oil must have a permit (6 NYCRR 364.2).</p> | <p>Verify that the facility has a permit before collecting, removing, transporting, or delivering to a treatment, storage, or disposal facility any waste oil.</p> <p>Verify that, if the facility has a transporter who removes waste oil from the premises, the transporter is permitted.</p> <p>(NOTE: The transporter need not be permitted if contracted with a generator who has been issued a permit, provided all of the following criteria are met:</p> <ul style="list-style-type: none"> <li>- the transporter is designated on the generator's transporter permit as a waste transporter</li> <li>- the transporter does not transport any regulated waste other than those specified on the permit while operating under the provisions of that permit</li> <li>- the transporter does not dispose of, deliver, or otherwise relinquish possession of any generator's regulated waste to any place other than that designated in the permit.)</li> </ul> |

## Appendix 8-1

### Fuel Constituents/Property

(Source: 6 NYCRR 225-2.4, Table 2-1)

| Constituent/Property            | Allowable               |
|---------------------------------|-------------------------|
| Polychlorinated Biphenyls (PCB) | Less than 50 ppm        |
| Total Halogens                  | 1000ppm maximum         |
| Lead                            | 250 ppm maximum         |
| Gross Heat Content              | 125,000 Btu/gal minimum |

## Appendix 8-2

### Specification Levels Which Apply Only to Used Oil When Burned for Energy Recovery (Source: 6 NYCRR 360-14.2)

| Property       | Specification Level |
|----------------|---------------------|
| Arsenic        | 5 ppm maximum       |
| Cadmium        | 2 ppm maximum       |
| Chromium       | 10 ppm maximum      |
| Lead           | 100 ppm maximum     |
| PCB            | 2 ppm maximum       |
| Total Halogens | 4000 ppm maximum    |
| Flash Point    | 100 °F minimum      |

### Appendix 8-3

#### **Applicability of Standards for the Management of Used Oil**

(Source: 6 NYCRR 374-2.2) [Added March 2010]

This subdivision identifies those materials which are subject to regulation as used oil under this Subpart and Subpart 360-14 of this Title. This subdivision also identifies some materials that are not subject to regulation as used oil under this Subpart, and indicates whether these materials may be subject to regulation as hazardous waste under Parts 370 through 374-1, 374-3, and 376 of this Title.

The storage in tanks of materials which are not subject to regulation as hazardous waste and which are identified in this section as petroleum product, used oil fuels, or as fuels or lubricants derived, re-refined, or re-processed from used oil, may be subject to the requirements and standards of Parts 612, 613, and 614 of this Title.

In addition to the requirements of this Subpart, used oil generators, collection centers, DIY collection centers, aggregation points, transporters, transfer, storage, re-refining or processing facilities, burners and marketers must meet all applicable requirements of Parts 201, 225, 364, and Subparts 360- 1 and 360-14 of this Title that are broader in scope or more stringent than the requirements of this Subpart.

(1) Used oil. The department presumes that used oil is to be recycled or burned for energy recovery unless a used oil handler disposes of used oil, or sends used oil for disposal. Except as provided in subdivision 374-2.2(b) of this section, the regulations of this Subpart apply to used oil and to materials identified in this subdivision as being subject to regulation as used oil, whether or not the used oil or material exhibits any characteristics of hazardous waste identified in section 371.3 of this Title.

(2) Mixtures of used oil and hazardous waste.

(i) Listed hazardous waste.

(a) Mixtures of hazardous waste, listed in section 371.4 of this Title, and of used oil are subject to regulation as hazardous waste under Parts 370 through 374-1, 374-3, and 376 of this Title, rather than as used oil under this Subpart.

(b) Rebuttable presumption for used oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in section 371.4 of this Title. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, as incorporated by reference in paragraph 370.1(e)(8) of this Title, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix 23 of this Title).

(1) Laboratory analyses completed for purposes of rebuttable presumption must be performed by a laboratory currently certified under the appropriate approval categories by the New York State Department of Health's Environmental Laboratory Approval Program (ELAP).

(2) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement, as described in paragraph 374-2.3(e)(3) of this Subpart, to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.

(3) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

(ii) Characteristic hazardous waste. Mixtures of used oil and of hazardous waste that solely exhibits one or more of the hazardous waste characteristics identified in section 371.3 of this Title, and mixtures of used oil and of hazardous waste that is listed in section 371.4 of this Title solely because it exhibits one or more of the characteristics of hazardous waste identified in section 371.3 of this Title are subject to:

(a) except as provided in clause (2)(ii)(c) of this subdivision, regulation as hazardous waste under Parts 370 through 374-1, 374-3, and 376 of this Title rather than as used oil under this Subpart, if the resultant mixture exhibits any characteristics of hazardous waste identified in section 371.3 of this Title; or

- (b) except as specified in clause (2)(ii)(c) of this subdivision, regulation as used oil under this Subpart, if the resultant mixture does not exhibit any characteristics of hazardous waste identified under section 371.3 of this Title.
  - (c) regulation as used oil under this Subpart, if the mixture is of used oil and a waste which is hazardous solely because it exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits), provided that the resultant mixture does not exhibit the characteristic of ignitability under subdivision 371.3(b) of this Title.
  - (iii) Conditionally exempt small quantity generator hazardous waste. Mixtures of used oil and conditionally exempt small quantity generator hazardous waste regulated under paragraph 371.1(f)(10) of this Title are subject to regulation as used oil under this Subpart.
- (3) Materials containing or otherwise contaminated with used oil.
- (i) Except as provided in subparagraph (3)(ii) of this paragraph, materials containing or otherwise contaminated with used oil from which the used oil has been properly drained or removed to the extent possible such that no visible signs of free-flowing oil remain in or on the material:
    - (a) are not used oil and thus not subject to this Subpart; and
    - (b) if applicable are subject to the hazardous waste regulations of Parts 370 through 374-1, 374-3, and 376 of this Title.
  - (ii) Materials containing or otherwise contaminated with used oil that are burned for energy recovery are subject to regulation as used oil under this Subpart.
  - (iii) Used oil drained or removed from materials containing or otherwise contaminated with used oil is subject to regulation as used oil under this Subpart.
- (4) Mixtures of used oil with products.
- (i) Except as provided in subparagraph (4)(ii) of this paragraph, mixtures of used oil and fuels or other fuel products are subject to regulation as used oil under this Subpart.
  - (ii) Mixtures of used oil and diesel fuel mixed on-site by the generator of the used oil for use in the generator's own vehicles are not subject to this Subpart once the used oil and diesel fuel have been mixed. Prior to mixing, the used oil is subject to the requirements of section 374-2.3 of this Subpart.
- (5) Materials derived from used oil.
- (i) Materials that are reclaimed from used oil that are used beneficially and are not burned for energy recovery or used in a manner constituting disposal (e.g., re-refined lubricants) are:
    - (a) not used oil and thus are not subject to this Subpart; and
    - (b) not solid wastes and are thus not subject to the hazardous waste regulations of Parts 370 through 374-1, 374-3, and 376 of this Title as provided in clause 371.1(d)(3)(ii)(a) of this Title.
  - (ii) Materials produced from used oil that are burned for energy recovery (e.g., used oil fuels) are subject to regulation as used oil under this Subpart and Part 225 of this Title.
  - (iii) Except as provided in subparagraph (5)(iv) of this paragraph, materials derived from used oil that are disposed of or used in a manner constituting disposal are:
    - (a) not used oil and thus are not subject to this Subpart; and
    - (b) are solid wastes regulated under Part 360 of this Title, unless they are subject to the hazardous waste regulations of Parts 370 through 374-1, 374-3, and 376 of this Title if the materials are listed or identified as hazardous waste.
  - (iv) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products are not subject to this Subpart.
- (6) Wastewater. Wastewater, the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the Federal Clean Water Act, as incorporated by reference in subdivision 370.1(e) of this Title (including wastewaters at facilities which have eliminated the discharge of wastewater), contaminated with "de minimis" quantities of used oil are not subject to the requirements of this Subpart. For purposes of this paragraph, "de minimis" quantities of used oils are defined as small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment during normal operations or small amounts of oil lost to the wastewater treatment system during washing or draining operations. This exception will not apply if the used oil is discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills, or other releases, or to used oil recovered from wastewaters.

- (7) Used oil introduced into crude oil pipelines or a petroleum refining facility.
- (i) Used oil mixed with crude oil or natural gas liquids (e.g., in a production separator or crude oil stock tank) for insertion into a crude oil pipeline is exempt from the requirements of this Subpart. The used oil is subject to the requirements of this Subpart prior to the mixing of used oil with crude oil or natural gas liquids.
  - (ii) Mixtures of used oil and crude oil or natural gas liquids containing less than one percent used oil that are being stored or transported to a crude oil pipeline or petroleum refining facility for insertion into the refining process at a point prior to crude distillation or catalytic cracking are exempt from the requirements of this Subpart.
  - (iii) Used oil that is inserted into the petroleum refining facility process before crude distillation or catalytic cracking without prior mixing with crude oil is exempt from the requirements of this Subpart provided that the used oil constitutes less than one percent of the crude oil feed to any petroleum refining facility process unit at any given time. Prior to insertion into the petroleum refining facility process, the used oil is subject to the requirements of this Subpart.
  - (iv) Except as provided in subparagraph (7)(v) of this paragraph, used oil that is introduced into a petroleum refining facility process after crude distillation or catalytic cracking is exempt from the requirements of this Subpart only if the used oil meets the specifications of paragraph 374- 2.2(b)(1) of this section. Prior to insertion into the petroleum refining facility process, the used oil is subject to the requirements of this Subpart.
  - (v) Used oil that is incidentally captured by a hydrocarbon recovery system or wastewater treatment system as part of routine process operations at a petroleum refining facility and inserted into the petroleum refining facility process is exempt from the requirements of this Subpart. This exemption does not extend to used oil which is intentionally introduced into a hydrocarbon recovery system (e.g., by pouring collected used oil into the wastewater treatment system).
  - (vi) Tank bottoms from stock tanks containing exempt mixtures of used oil and crude oil or natural gas liquids are exempt from the requirements of this Subpart.
- (8) Used oil on vessels. Used oil produced on vessels from normal shipboard operations is not subject to this Subpart until it is transported ashore.
- (9) Used oil containing PCBs. Used oil containing 50 ppm by weight, or greater, of polychlorinated biphenyls (PCBs) is a hazardous waste as defined in subdivision 371.4(e) of this Title. In addition to the requirements of this Subpart, used oil containing any quantifiable level of PCBs may be subject to the requirements found in 40 CFR 761.20(e), as incorporated by reference in subdivision 370.1(e) of this Title.

## SECTION 9

### SOLID WASTE MANAGEMENT

#### New York Supplement, March 2010

This section covers the state requirements for Solid Waste Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Active Life* - that period of time during which solid waste is or will be routinely and regularly received. In the case of landfills, active life ends at the completion of closure activities (6 NYCRR 360-1.2).
- *Asbestos Waste* - friable solid waste that contains more than 1 percent asbestos by weight and can be crumbled, pulverized, or reduced to powder, when dry, by hand pressure. Asbestos waste also includes any asbestos-containing solid waste that is collected in a pollution control device designed to remove asbestos (6 NYCRR 360-1.2).
- *Ash Residue* - all the solid residue and any entrained liquids resulting from the combustion of solid waste or solid waste in combination with fossil fuel at a solid waste incinerator, including bottom ash, boiler ash, fly ash, and the solid residue of any air pollution control device used at a solid waste incinerator (6 NYCRR 360-1.2).
- *Bottom Ash* - the ash residue remaining after combustion of solid waste or solid waste in combination with fossil fuel in a solid waste incinerator that is discharged through and from the grates, combustor, or stoker (6 NYCRR 360-1.2).
- *Bypass Waste* - any solid waste that is either within the control of the operator of a solid waste incinerator or refuse-derived fuel processing facility or pyrolysis facility, or within the control of another person, that is destined for treatment at the facility but cannot be so treated, and includes either (6 NYCRR 360-1.2):
  1. downtime waste - any treatable or burnable solid waste accumulated during a scheduled or unscheduled maintenance period of the facility
  2. excess waste, meaning solid waste that cannot be treated because the facility is operating at the approved design capacity.
- *Certification* - a statement of professional opinion based upon investigation, analysis, knowledge, and belief that is stated to be true and accurate (6 NYCRR 360-1.2).
- *Clean Fill* - material consisting of concrete, steel, wood, sand, dirt, soil, glass, construction and demolition debris, and other recognizable inert material designated by the Department (6 NYCRR 360-8.2).
- *Coal Combustion* - the combustion of coal or the combustion of coal along with Departmental-approved alternate fuels, such as tires, at an energy generation facility provided that alternate fuels comprise no greater than 30 percent of the fuel burned at the facility (6 NYCRR 360-1.2).
- *Coefficient of Permeability and Hydraulic Conductivity* - the rate of laminar flow of water through a unit cross-sectional area of a porous medium of bottom ash and fly ash (6 NYCRR 360-1.2).
- *Combustion* - the thermal treatment of solid waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the waste. Examples of combustion processes include incineration, pyrolysis, and fluidized bed (6 NYCRR 360-1.2).



- *Commercial Waste* - solid waste generated by stores, offices, restaurants, warehouses, and nonmanufacturing activities at industrial facilities (6 NYCRR 360-1.2).
- *Commissioner* - the Commissioner of Environmental Conservation or his duly designated representative (6 NYCRR 360-1.2).
- *Composting Facility* - a solid waste management facility used to provide aerobic, thermophilic decomposition of solid organic constituents of solid waste to produce a stable, humus-like material (6 NYCRR 360-1.2).
- *Construction* - any physical modification to the site at which an existing or proposed solid waste management facility is or will be located, including, but not limited to, site preparation (e.g., clearing and grading, excavation of borrow material for daily cover, etc.) (6 NYCRR 360-1.2).
- *Construction and Demolition Debris (C&D Debris)* - uncontaminated solid waste resulting from the construction, remodeling, repair, and demolition of utilities, structures, and roads; and uncontaminated solid waste resulting from land clearing. Such waste includes, but is not limited to, bricks, concrete and other masonry materials, soil, rock, wood (including painted, treated, and coated wood and wood products), land clearing debris, wall coverings, plaster, drywall, plumbing, fixtures, nonasbestos insulation, roofing shingles and other roof coverings, asphaltic pavement, glass, plastics that are not sealed in a manner that conceals other wastes, empty buckets 10 gal or less in size and having no more than 1 in. of residue remaining on the bottom, electrical wiring and components containing no hazardous liquids, and pipe and metals that are incidental to any of the above. Solid waste that is not C&D debris (even if resulting from the construction, remodeling, repair, and demolition of utilities, structures, and roads and land clearing), includes, but is not limited to, asbestos waste, garbage, corrugated container board, electrical fixtures containing hazardous liquids such as fluorescent light ballasts or transformers, fluorescent lights, carpeting, furniture, appliances, tires, drums, containers greater than 10 gal in size, any containers having more than 1 in. of residue remaining on the bottom, and fuel tanks. Specifically excluded from the definition of C&D debris is solid waste (including what otherwise would be C&D debris) resulting from any processing technique, other than that employed at a Department-approved C&D debris processing facility, that renders individual waste components unrecognizable, such as pulverizing or shredding. Also, waste contained in an illegal disposal site may be considered C&D debris if the Department determines that such waste is similar in nature and content to C&D debris (6 NYCRR 360-1.2).
- *Construction and Demolition Debris Processing Facility* - a processing facility that receives and processes construction and demolition debris by any means (6 NYCRR 360-1.2).
- *Construction Certification Report* - a report submitted to the Department upon completion of the construction of a solid waste management facility that includes the resulting information prepared in accordance with the requirements of this section (6 NYCRR 360-1.2).
- *Container* - any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled (6 NYCRR 360-1.2).
- *Contingency Plan* - a document describing organized, planned, and technically coordinated and financially feasible courses of action to be followed in case of emergency or other special conditions including, but not limited to, equipment breakdowns, fire, odor, vectors, explosion, spills, receipt, or release of hazardous or toxic materials or substances, groundwater, surface water, or air contamination attributable to a solid waste management facility and other incidents that could threaten human health or safety or the environment (6 NYCRR 360-1.2).
- *Cover Material* - soil or other suitable material, or a combination of same, acceptable to the Department that is used to cover compacted solid waste in a landfill (6 NYCRR 360-1.2).
- *Daily Cover* - a compacted layer of at least 6 in. of cover material, unless otherwise approved by the Department that is placed on all exposed solid waste at the end of each working day of operation at a landfill (6 NYCRR 360-1.2).

- *Department* - the New York State Department of Environmental Conservation (6 NYCRR 360-1.2).
- *Dike* - an embankment or ridge of either natural or synthetic materials used to prevent, control, or confine the movement of liquids or solids (6 NYCRR 360-1.2).
- *Discarded* - a material is discarded if it is abandoned by being (6 NYCRR 360-1.2):
  1. disposed of
  2. burned or incinerated, including being burned as a fuel for the purpose of recovering usable energy
  3. accumulated, stored, or physically, chemically, or biologically treated (other than burned or incinerated) instead of or before being disposed of.
- *Discharge* - the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of any solid waste, or solid waste constituent, including leachate, into or on any air, land, or water (6 NYCRR 360-1.2).
- *Disposal* - the abandonment, discharge, deposit, injection, dumping, spilling, leaking or placing of any waste or hazardous waste on or into any lands or waters of the State so that such waste or hazardous waste or any related constituent thereof may enter the environment or be emitted into the air or be discharged into any waters, including ground waters thereof. Disposal also means the thermal destruction of waste or hazardous waste and the burning of such wastes as fuel for the purpose of recovering usable energy (6 NYCRR 364.1).
- *Disposal Facility* - a solid waste management facility or part of one in or on which solid waste is intentionally placed, including any land or water, and at which solid waste will remain after closure (6 NYCRR 360-1.2).
- *Disposed* - a material is disposed of if it is discharged, deposited, injected, dumped, spilled, leaked, or placed into or on any land or water so that such material or any constituent thereof may enter the environment or be emitted into the air, or discharged into groundwater or surface water (6 NYCRR 360-1.2).
- *Domestic Sewage* - water-carried human and animal wastes from residences, buildings, industrial establishments, or other places, together with such groundwater infiltration and surface waste as may be present (6 NYCRR 360-1.2).
- *ECL and Environmental Conservation Law* - chapter 43-B of the Consolidated Laws of New York State (6 NYCRR 364.1).
- *Empty* - wastes have been removed using the practices commonly employed to remove materials from that type of container so that no more than one inch (2.5 centimeters [cm]) of residue remains on the bottom of the container; or in the case of compressed gas, when the pressure in the container approaches atmospheric (6 NYCRR 364.1).
- *Energy Recovery* - the treatment by which energy is extracted and marketed from solid waste in excess of that required to operate the facility (6 NYCRR 360-1.2).
- *EPA* - the United States Environmental Protection Agency (6 NYCRR 364.1).
- *Existing Landfill* - (with respect to Long Island landfills) a landfill that was in operation of 18 December 1983. The lateral limit of an existing landfill is set forth in the permit or consent order in effect on that date or by the limits, projected on a horizontal plane, of the actual solid waste in place on 18 December 1983 (6 NYCRR 360-8.2).
- *Expansion* - (with respect to Long Island landfills) a lateral expansion beyond the lateral limits of an existing landfill (6 NYCRR 360-8.2).

- *Facility Monitoring Points* - designated locations for sampling leachate or other media within the containment system of a solid waste management facility (6 NYCRR 360-1.2).
- *Farm* - the raising or harvesting of any agricultural or horticultural commodity through the cultivation of the soil, aquacultural product, or the raising, shearing, feeding, caring for, training, or management of livestock, bees, poultry, furbearing animals, fish, domestic animals, or wildlife (6 NYCRR 360-1.2).
- *Final Cover System* - an engineered layer of materials approved by the Department that is placed on any surface of a landfill where no additional solid waste will be deposited within 1 yr and serves to restrict infiltration, support, vegetation, control landfill gas, and promote surface drainage (6 NYCRR 360-1.2).
- *Flood Plain* - the land susceptible to being inundated by a flood that has a 1 percent or greater chance of recurring in any given year (or 100-yr flood plain) (6 NYCRR 360-1.2).
- *Fly Ash* - the ash residue from the combustion of solid waste or solid waste in combination with fossil fuel that is entrained in the gas stream of the solid waste incinerator and removed by the air pollution control equipment (6 NYCRR 360-1.2).
- *Free Liquids* - liquids which readily separate from the solid portion of a solid waste under ambient temperature and pressure (6 NYCRR 360-1.2).
- *Freeboard* - the vertical distance between the lowest elevation of the top of a tank, surface impoundment, or dike, and the highest level of the surface of the solid waste contained therein (6 NYCRR 360-1.2).
- *Garbage* - putrescible solid waste including animal and vegetable waste resulting from the handling, storage, sale, preparation, cooking, or serving of foods. Garbage originates primarily in home kitchens, stores, markets, restaurants, and other places where food is stored, prepared, or served (6 NYCRR 360-1.2).
- *Generator* - any person, by site, whose act or process produces solid waste or whose act first causes a solid waste to become subject to regulation (6 NYCRR 364.1).
- *Geocomposite* - a manufactured material using geotextiles, geogrids, geomembranes, or combinations of same in a laminated or composite form (6 NYCRR 360-1.2).
- *Geogrid* - a deformed or nondeformed netlike polymeric material used with foundation, soil, rock, earth, or any other geotechnical engineering-related material as an integral part of the structure or system to provide reinforcement to soil slopes (6 NYCRR 360-1.2).
- *Geomembrane* - an essentially impermeable membrane used with foundation, soil, rock, earth, or any other geotechnical engineering-related material as an integral part of a structure or system designed to limit the movement of liquid or gas in the system (6 NYCRR 360-1.2).
- *Geosynthetic* - the generic classification of all synthetic materials used in geotechnical engineering applications, including geotextiles, geogrids, geomembranes, and geocomposites (6 NYCRR 360-1.2).
- *Geotextile* - any permeable textile used with foundations, soil, rock, earth, or any other geotechnical engineering-related material as an integral part of a structure or system designed to act as a filter to prevent the flow of soil fines into drainage systems, to provide planar flow for drainage, or to serve as a cushion to protect geomembranes or to provide structural support (6 NYCRR 360-1.2).
- *Groundwater* - water below the land surface in a saturated zone of soil or rock. This includes perched water separated from the main body of groundwater by an unsaturated zone (6 NYCRR 360-1.2).
- *Household Hazardous Waste* - household waste which but for its point of generation, would be a hazardous waste under 6 NYCRR 371, including pesticides as defined in ECL, article 33 (6 NYCRR 360-1.2).

- *Household Medical Waste* - household solid waste which, but for its point of generation, would be a regulated medical waste (6 NYCRR 360-1.2).
- *Household Waste* - solid waste discarded from single or multiple dwellings, hotels, motels, campsites, public and private recreation areas, ranger stations, and other residential sources (6 NYCRR 360-1.2).
- *Incinerator* - an enclosed device using controlled flame combustion to thermally break down solid waste, including refuse-derived fuel, to an ash residue that contains little or no combustible materials (6 NYCRR 360-1.2).
- *Industrial-Commercial Waste* - any solid waste which originates at, is generated by, or occurs as a result of any industrial or commercial activity. Industrial-commercial wastes are exemplified by, but not limited to (6 NYCRR 364.1):
  1. liquids such as:
    - a. acids, alkalis, caustics, leachate, petroleum (and its derivatives), and processes or treatment wastewaters;
    - b. sludges, which semi-solid substances are resulting from process or treatment operations or residues from storage or use of liquids;
  2. solids such as:
    - a. solidified chemicals, paints or pigments;
    - b. dredge spoil, foundry sand, and the end or by-products of incineration or other forms of combustion, including bottom ash and fly ash;
  3. contained gaseous materials
  4. hazardous waste
  5. any liquid, sludge, septage, solid, semi-solid substance or contained gaseous material in which any of the foregoing is intermixed or absorbed, or onto which any of the foregoing is adhered.
- *Industrial Waste* - solid waste generated by manufacturing or industrial processes. Such processes may include, but are not limited to, the following: electric power generation; fertilizer/agricultural chemicals; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. The forms of such wastes are exemplified by, but not limited to: liquids such as acids, alkalis, caustics, leachate, petroleum (and its derivatives), and processes or treatment wastewaters; sludges which are semisolid substances resulting from process or treatment operations or residues from storage or use of liquids; solidified chemicals, paints, or pigments; and dredge spoil, foundry sand, and the end or byproducts of incineration or other forms of combustion. This term does not include oil or gas drilling, production, and treatment wastes (such as brines, oil, and frac fluids); overburden, spoil, or tailings resulting from mining; or solution mining brine and insoluble component wastes (6 NYCRR 360-1.2).
- *Inert Material* - material that contains neither leachate constituents at concentrations in excess of groundwater quality standards contained in Part 703 of this Title nor putrescible material (6 NYCRR 360-8.2).
- *Land Application Facility* - a site where solid waste is applied to the soil surface or injected into the upper layer of the soil to improve soil quality or provide plant nutrients. Solid waste suitable for this purpose includes, but is not limited to, certain food processing waste, sewage treatment plant sludge, and septage (6 NYCRR 360-1.2).
- *Land Clearing Debris* - vegetative matter, soil, and rock resulting from activities such as land clearing and grubbing, utility line maintenance, or seasonal or storm-related cleanup such as trees, stumps, brush, and leaves and including wood chips generated from these materials. Land clearing debris does not include yard waste which has been collected at the curbside (6 NYCRR 360-1.2).

- *Landfill* - land or a disposal facility or part of one where solid waste or its residue after treatment is intentionally placed and which is not a land application facility, surface impoundment, injection well, or waste pile (6 NYCRR 360-1.2).
- *Landspreading Facility* - a site where sludge or septage is applied to the soil surface or injected into the upper layer of the soil to improve soil quality or to provide plant nutrients. Sludges suitable for these purposes include food processing waste, winery waste, brewery waste, cannery waste and sewage treatment plant sludge (6 NYCRR 364.1).
- *Leachate* - any solid waste in the form of a liquid, including any suspended components in the liquid that results from contact with or passage through solid waste (6 NYCRR 360-1.2).
- *Lower Explosive Limit (LEL)* - the lowest percentage by volume of a mixture of explosive gases which will propagate a flame in air at 25 °C and atmospheric pressure (6 NYCRR 360-1.2).
- *Low Level Radioactive Waste (LLRW)* - radioactive material that is not high-level radioactive waste, transuranic waste, spent nuclear fuel, or the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content (6 NYCRR 364.1).
- *New Landfill* - (with respect to Long Island landfills) a landfill other than an existing landfill or an expansion (6 NYCRR 360-8.2).
- *Person* - any individual, public or private corporation, political subdivision, government agency, department or bureau of the State or Federal government, municipality, industry, copartnership, association, firm, trust, estate or any other legal entity (6 NYCRR 364.1).
- *Point Source* - any discernible, confined, and discrete conveyance from which pollutants are or may be discharged. Sources of discharge include, but are not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft. This term does not include return flow from irrigated lands (6 NYCRR 360-1.2).
- *Processing Facility* - a combination of structure, machinery, or devices, other than collection and transfer vehicles, utilized to reduce or alter the volume or the chemical or physical characteristics of solid waste through processes such as, but not limited to, separating, crushing, screening, baling, or shredding before its delivery to any solid waste management facility (6 NYCRR 360-1.2).
- *Product of Resource Recovery, Incineration, or Composting* - ash residue, noncombustible residue from a recyclables handling and recovery facility, untreatable waste residue from a composting facility, and compost (6 NYCRR 360-8.2).
- *Publicly Owned Treatment Works* - any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature that is owned by a state or municipality (as defined in section 502(4) of the Federal Water Pollution Control Act, as amended). This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a publicly owned treatment works providing treatment (6 NYCRR 360-1.2).
- *Putrescible* - the tendency of organic matter to decompose with the formation of malodorous byproducts. For the purpose of this section, wood is not considered to be putrescible (6 NYCRR 360-1.2).
- *Putrescible Waste* - solid waste that contains organic matter capable of being decomposed by microorganisms and of such a character and proportion as to be capable of attracting or providing food for disease vectors (6 NYCRR 360-1.2).

- *Pyrolysis* - a process using applied heat in an oxygen-deficient or oxygen-free environment for chemical decomposition of solid waste. Any byproducts or residues of pyrolysis are not considered refuse-derived fuel (6 NYCRR 360-3.2).
- *Raw Sewage* - any untreated sanitary waste (6 NYCRR 364.1).
- *Recover* - any act or process by which recyclables or reusables are separated from the solid waste stream (6 NYCRR 360-1.2).
- *Recycle* - to use recyclables in manufacturing a product (6 NYCRR 360-1.2).
- *Recyclable* - solid waste that exhibits the potential to be used repeatedly (6 NYCRR 360-1.2).
- *Recyclables Handling and Recovery Facility* - a solid waste processing facility, other than collection and transfer vehicles, at which nonputrescible recyclables are separated from the solid waste stream or at which previously separated nonputrescible recyclables are separated from the solid waste stream or at which previously separated nonputrescible recyclables are processed (6 NYCRR 360-1.2).
- *Re-fined oil* - any waste oil from which physical and/or chemical contaminants have been removed so that it is substantially equivalent to virgin distillate or virgin residual oil (6 NYCRR 364.1).
- *Refuse* - anything putrescible or nonputrescible that is discarded or rejected as useless or worthless (6 NYCRR 360-1.2).
- *Refuse-Derived Fuel* - treated solid waste that is used as a fuel. Off-products of pyrolysis are not considered refuse-derived fuel (6 NYCRR 360-1.2).
- *Refuse-Derived Fuel Processing Facility* - the combination of structures, machinery, or devices utilized to reduce or alter the volume of mixed solid waste before delivery to a solid waste incinerator or pyrolysis facility (6 NYCRR 360-1.2).
- *Regulated Medical Waste (RMW)* - any medical waste that is a solid waste generated in the diagnosis, treatment (e.g., provision of medical services), or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals, that is not excluded or exempted (see Appendix 8-1) and that is listed below (6 NYCRR 360-17.2):
  1. cultures and stocks of infectious agents and associated biologicals, including: cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures
  2. human pathological wastes, including tissues, organs, body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers
  3. liquid waste human blood, products of human blood, items saturated and/or dripping with human blood, or items that were saturated and/or dripping with human blood that are now caked with dried human blood, including serum, plasma, and other blood components, and their containers, which were used or intended for use in either patient care, testing and laboratory analysis or the development of pharmaceuticals. Intravenous bags are also included in this category
  4. sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), Pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips
  5. contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals, or testing of pharmaceuticals

6. wastes from surgery or autopsy that were in contact with infectious agents, including soiled dressings, sponges, drapes, lavage tubes, drainage sets, underpads, and surgical gloves
  7. laboratory wastes from medical, pathological, pharmaceutical, or other research, commercial, or industrial laboratories that were in contact with infectious agents, including slides and cover slips, disposable gloves, laboratory coats, and aprons
  8. dialysis wastes that were in contact with the blood of patients undergoing hemodialysis or renal dialysis, including contaminated disposable equipment and supplies such as tubing, filters, disposable sheets, towels, gloves, aprons, and laboratory coats
  9. biological waste and discarded materials contaminated with blood, excretion, exudates, or secretion from humans who are isolated to protect others from certain highly communicable diseases, or isolated animals known to be infected with highly communicable diseases
  10. the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.
- *Regulated Waste* - a solid waste which is raw sewage, septage, sludge, from a sewage or water supply treatment plant, waste oil or industrial-commercial waste, including hazardous waste (6 NYCRR 364.1).
  - *Regulated Wetland* - a wetland area regulated pursuant to the ECL, article 24 (Freshwater Wetlands) or ECL, article 25 (Tidal Wetlands) (6 NYCRR 360-1.2).
  - *Residue* - all solid waste remaining after treatment and includes, but is not limited to, ash residue and other solid waste that is not recovered or combusted (6 NYCRR 360-1.2).
  - *Resource Recovery Facility* - a combination of structures, machinery, or devices utilized to separate, process, modify, convert, treat, or prepare collected solid waste so that component materials or substances or recoverable resources may be recovered or used as a raw material or energy source (6 NYCRR 360-1.2).
  - *Salvage Area* - a controlled, segregated area at a solid waste management facility where the facility owner or operator authorizes salvaging (6 NYCRR 360-1.2).
  - *Salvaging* - the incidental removal of solid waste for reuse under the control of the facility owner or operator (6 NYCRR 360-1.2).
  - *Saturated Zone* - that part of the earth's crust in which the interconnected voids are completely filled with water at a pressure equal to or greater than atmospheric pressure. The interface between the saturated zone and the unsaturated zone is the groundwater table (6 NYCRR 360-1.2).
  - *Septage* - the contents of a septic tank, cesspool, or other individual sewage treatment facility that receives domestic sewage wastes (6 NYCRR 360-1.2) (6 NYCRR 364.1).
  - *Sewage Sludge* - the accumulated semisolids or solids resulting from treatment of wastewaters from publicly or privately owned or operated sewage treatment plants. Sewage sludge does not include grit or screenings or ash generated during the incineration of sewage sludge (6 NYCRR 360-1.2).
  - *Sludge* - any solid, semisolid, or liquid waste generated from a wastewater treatment plant, water supply treatment plant, or air pollution control facility but does not include the treated effluent from a wastewater treatment plant (6 NYCRR 360-1.2) (6 NYCRR 364.1).
  - *Solid Waste* - any garbage, refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, and other discarded materials including solid, liquid, semisolid, or contained gaseous material, resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S. Code (USC) 1342, as amended (86 Statute 880), or source, special nuclear, or byproduct material as defined by the *Atomic Energy Act* of 1954, as amended (68 Statute 923) except as may be provided by existing agreements

between the State of New York and the government of the United States (see section 360-1.3 of 6 NYCRR (6 NYCRR 360-1.2)).

- *Solid Waste* - any garbage, refuse, sludge or any solid, liquid, semi-solid or contained gaseous material, resulting from industrial, commercial, mining, agricultural, community or other activities, not excluded below, which is discarded, disposed or, burned or incinerated, including being burned as a fuel for the purpose of recovering usable energy, or is being accumulated, stored, or physically, chemically, or biologically treated in lieu of or prior to being disposed of, burned or incinerated, or which has served its original intended use and is sometimes discarded, or is a manufacturing or mining by-product and sometimes is discarded. The following materials are not solid wastes for the purposes of this Part (6 NYCRR 364.1):
  1. domestic sewage and any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly owned treatment works for treatment (domestic sewage means untreated sanitary wastes that pass through a sewer system);
  2. industrial wastewater discharges that are point source discharges for which a permit has been issued pursuant to article 17 of the Environmental Conservation Law;(NOTE: This exclusion applies only to the actual point source discharge. The exclusion does not apply to industrial wastewater while they are being collected, stored or treated before discharge, nor does it apply to sludges that are generated by industrial wastewater treatment.)
  3. irrigation return flows;
  4. radioactive materials which are source, special nuclear, or by-product material. For purposes of this Part: Source material means uranium and/or thorium, or ores containing by weight 0.05 percent or more of uranium and/or thorium; special nuclear material means plutonium, uranium 233, uranium enriched in uranium 233 or uranium 235, or any material artificially enriched by any of these; and by-product material means radioactive material yielded in or made radioactive by exposure to radiation incident to the process by producing or utilizing special nuclear materials, tailings or waste produced by the extrication or concentration of uranium or thorium from any ore processed primarily for its source material content; and
  5. materials subject to in-site mining techniques which are not removed from the ground as part of the extraction process.
- *Solid Waste Incinerator* - an incinerator combusting solid waste or solid waste in combination with fossil fuel with or without energy recovery (6 NYCRR 360-1.2).
- *Solid Waste Management Facility* - any facility employed beyond the initial solid waste collection process and managing solid waste, including, but not limited to the following:
  1. transfer stations
  2. rail-haul or barge-haul facilities
  3. landfills
  4. disposal facilities
  5. solid waste incinerators
  6. refuse-derived fuel processing facilities
  7. pyrolysis facilities
  8. construction and demolition debris processing facilities
  9. land application facilities
  10. composting facilities
  11. surface impoundments
  12. used oil storage, reprocessing, and rerefining facilities
  13. recyclables handling and recovery facilities
  14. waste tire storage facilities
  15. RMW treatment facilities.The term includes all structures, appurtenances, and improvements on the land used for the management or disposal of solid waste (6 NYCRR 360-1.2).
- *Storage* - the containment of any solid waste in a manner which does not constitute disposal; provided, however, that any accumulation of solid waste for a period in excess of 18 mo shall be deemed to constitute disposal (6 NYCRR 360-1.2).



- *Storage* - the holding of solid waste for a temporary period, at the end of which the solid waste is processed, recovered disposed or stored elsewhere (6 NYCRR 364.1).
- *Storage Incidental to Transport* - any on-vehicle storage which occurs enroute from the point of initial waste pickup to the point of final delivery for purposes such as, but no limited to, overnight on-the-road stops, stops for meals, fuel and driver comfort, stops at the transporter's facility for weekends immediately prior to shipment, or on-vehicle storage not to exceed five days at the transporter's facility for the express purpose of consolidating loads (where such loads are not removed from their original packages or containers) for delivery to an authorized treatment, storage or disposal facility (6 NYCRR 364.1).
- *Surface Impoundment* - a solid waste management facility or part of one that is a natural topographical depression, excavation, or diked area formed primarily of earthen materials (although it may be lined with synthetic materials), that is designed to hold solid waste in semisolid or liquid form and that is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons (6 NYCRR 360-1.2).
- *Surface Impoundment or Impoundment* - a facility or part of a facility which is a natural topographical depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of solid waste in semisolid or liquid form, and which is not an infection well. Examples of surface impoundments are holding, storage, settling and aeration pits, ponds and lagoons (6 NYCRR 364.1).
- *Surface Water* - lakes, bays, sounds, ponds, impounding reservoirs, perennial streams and springs, rivers, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial limits of New York State, and all other perennial bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private. Surface impoundments at solid waste management facilities are not surface waters (6 NYCRR 360-1.2).
- *Transfer Incident to Transport* - any transfer of waste material associated with storage incidental to transport where such material is not unpackaged, mixed or pumped from one container or truck into another (6 NYCRR 364.1).
- *Transfer Station* - a solid waste management facility other than a recyclables handling and recovery facility, used oil facility, or a construction and demolition debris processing facility, where solid waste is received for the purpose of subsequent transfer to another solid waste management facility for further processing, treating, transfer, or disposal. Transfer of solid waste from vehicle to vehicle for the purpose of consolidating loads, as part of the initial collection process, is not considered a transfer station provided the transfer activity occurs along the collection route where the point of transfer changes from day to day. Transfer of leakproof, closed modular containers of solid waste from vehicle to vehicle, including truck to train, for the purpose of consolidating loads for shipment to an authorized disposal or treatment facility, is not considered a transfer station provided all of the following conditions are met (6 NYCRR 360-1.2):
  1. the contents of each container remain in their closed container during the transfer between vehicles
  2. storage remains incidental to transport at the location where the containers are consolidated
  3. containers are acceptable to the Department and maintained in a safe, nuisance-free (e.g., dust, odor, noise, etc.) manner
  4. the transfer location is under the ownership or control of the transporter.
- *Treated Regulated Medical Waste* - RMW that has been treated to substantially reduce or eliminate its potential for causing disease but has not yet been destroyed (6 NYCRR 360-17.2).
- *Treatment* - except in the case of RMW, any method, technique, or process designed to change the physical, chemical, or biological character or composition of any solid waste to recover energy or materials from it to render it safer to transport, store, or dispose of or to make it amenable for reuse, recovery, storage, or reduction in volume (6 NYCRR 360-1.2). In regards to RMW, treatment means any method, technique, or process designed to change the character or composition of any RMW so as to either neutralize such waste or to render

such waste not infectious, safer for transport, amenable for recovery, amenable for storage, or reduced in volume (6 NYCRR 360-17.2).

- *Treatment, Storage or Disposal Facility (TSD)* - all contiguous land and structures, other appurtenances, and improvements on the land used for treating, storing or disposing of solid waste. A facility may consist of several treatment storage or disposal operations units (e.g., one or more landfills, surface impoundments or combinations of them) (6 NYCRR 364.1).
- *Uncontaminated* - With respect to construction and demolition debris (C&D debris), uncontaminated means C&D debris that is not mixed or commingled with other solid waste at the point of generation, processing or disposal, and that is not contaminated with spills of a petroleum product, hazardous waste or industrial waste. Contamination from spills of a petroleum product does not include asphalt or concrete pavement that has come into contact with petroleum products through normal vehicle use of the roadway. (6 NYCRR 360-7.1).
- *Unsaturated Zone* - any zone between the land surface and the zone of saturation in which the interconnected void spaces in soil or rock are only partially or intermittently filled with water (6 NYCRR 360-1.2).
- *Untreatable Waste* - the same as defined in ECL section 27-0704. Untreatable waste for a solid waste incinerator includes, but is not limited to: batteries, such as dry cell batteries, mercury batteries, and vehicle batteries; refrigerators; stoves; freezers; washers; dryers; bedsprings; vehicle frame parts, crankcases, transmissions, and engines; lawn mowers; snow blowers; bicycles; file cabinets; air conditioners; hot water heaters; water storage tanks; water softeners; furnaces; oil storage tanks; metal furniture; propane tanks; and clean fill (6 NYCRR 360-8.2).
- *Vector* - a carrier that is capable of transmitting a pathogen from one organism to another including, but not limited to, flies and other insects, rodents, birds, and vermin (6 NYCRR 360-1.2).
- *Vehicle* - any motor vehicle, trailer, water vessel, railroad car, airplane, or other device for transporting solid waste (6 NYCRR 360-1.2).
- *Vehicle* - any device or contrivance which is required by law to be registered with a state, province or the Federal government for conveyance over public roads and which actually contains or carries a regulated waste, for example, in the case of a tractor-trailer combination, the trailer is considered to be the vehicle; and in the case of a roll-off container or other removable containment device, it is the mobile flatbed or the undercarriage that is considered to be the vehicle (6 NYCRR 364.1).
- *Waste Oil* - used engine lubricating oil and any other oil, including but not limited to fuel oil, motor oil, gear oil, cutting oil, transmission fluid, hydraulic fluid, dielectric fluid, oil storage tank residue, animal oil, and vegetable oil, which has been contaminated by physical or chemical impurities, through use or accident, and has not subsequently been re-refined (6 NYCRR 364.1).
- *Waste Tire* - any solid waste which consists of whole tires or portions of tires. For the purposes of this section, tire casings separated for retreading and tires with sufficient tread for resale shall be included under this term, however, crumb rubber shall not be considered a solid waste (6 NYCRR 360-1.2).
- *Yard Waste* - leaves, grass clippings, garden debris, tree branches, limbs, and other similar wood materials (6 NYCRR 360-1.2).
- *Zone of Saturation* - a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere (6 NYCRR 360-1.2).

**SOLID WASTE MANAGEMENT  
GUIDANCE FOR NEW YORK CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

|   |                                    |
|---|------------------------------------|
| Missing Checklist Items   | SO.2.1.NY.                         |
| State-Specific Requirements   |                                    |
| General   | SO.5.1.NY. and SO.5.2.NY.          |
| Permits/Notifications/Exemptions  | SO.6.1.NY. and SO.6.2.NY.          |
| Design  | SO.7.1.NY.                         |
| Operations  | SO.8.1.NY. through SO.8.17.NY.     |
| Specific Wastes   | SO.9.1.NY. through SO.9.3.NY.      |
| Transfer Facilities   | SO.15.1.NY. through SO.15.5.NY.    |
| Transportation  | SO.20.1.NY. through SO.20.3.NY.    |
| Recycling: Coal Combustion Ash  | [Moved]                            |
| Municipal Solid Waste Landfills   | SO.67.1.NY. and SO.67.2.NY.        |
| Ash Handling and Disposal   | SO.92.1.NY.                        |
| Resource Recovery Facilities  | SO.95.1.NY. through SO.95.4.NY.    |
| Medical Waste   |                                    |
| Generators  | SO.105.1.NY. and SO.105.2.NY.      |
| Containers/Labeling/Storage Areas   | SO.110.1.NY. through SO.110.4.NY.  |
| Transportation  | SO.115.1.NY.                       |
| Treatment and Disposal  | SO.120.1.NY.                       |
| Landfills   | SO.135.1.NY. through SO.135.19.NY. |
| Inert Waste Landfills   | SO.140.1.NY. through SO.140.4.NY.  |
| Incinerators (Includes refuse-derived fuel processing facilities and solid waste pyrolysis units) | SO.145.1.NY. through SO.145.7.NY.  |
| Surface Impoundments  | SO.155.1.NY. through SO.155.5.NY.  |
| Waste Tire Management   | SO.160.1.NY.                       |
| Yard Waste/Composting Units   | SO.165.1.NY. through SO.165.7.NY.  |
| Other Disposal Units  | SO.170.1.NY. through SO.170.9.NY.  |
| Other Treatment/Processing Units  | [Deleted / Moved]                  |
| Closure of Solid Waste Facilities   | SO.180.1.NY. and SO.180.2.NY.      |

## GUIDANCE FOR APPENDIX USERS

| REFER TO APPENDIX NUMBERS: | REFER TO APPENDIX TITLES:   |
|----------------------------|---|
| 9-1                        | Materials Not Considered Solid Waste  |
| 9-2                        | Exempt Facilities   |
| 9-3                        | Exemptions from Transportation Requirements   |
| 9-4                        | Exclusions and Exemptions to the Medical Waste Definition                                       |
| 9-5                        | Pathogen and Vector Attraction Reduction Requirements for OWP Facilities                        |
| 9-6                        | Pollutant Limits - Class B Materials & Input To Class A Facilities                              |
| 9-7                        | Pollutant Limits - Products   |
| 9-8                        | Parameters for Analysis - Biosolids/Sludge  |
| 9-9                        | Parameters for Analysis - Biosolids/MSW/Sludge Products   |
| 9-10                       | Annual Product Testing Frequency - Biosolids/Sludge/MSW   |
| 9-11                       | Land Application Registration Restrictions  |
| 9-12                       | Cumulative Metal Loading Limits   |
| 9-13                       | Pathogen and Vector Attraction Reduction Requirements for Biosolids Land Application Facilities |
| 9-14                       | Analyses Required During Operation - Biosolids  |

| <b>COMPLIANCE CATEGORY:<br/>SOLID WASTE MANAGEMENT<br/>New York Supplement</b>   |   |
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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>SO.2.</b></p> <p><b>MISSING CHECKLIST<br/>ITEMS</b></p> <p><b>SO.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

| <b>COMPLIANCE CATEGORY:<br/>SOLID WASTE MANAGEMENT<br/>New York Supplement</b>  |  |
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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <b>STATE-SPECIFIC<br/>REQUIREMENTS</b><br><br><b>SO.5<br/>General</b><br><br><b>SO.5.1.NY.</b> Disposal of solid waste is prohibited except at specific disposal facilities (6 NYCRR Section 360-1.5).<br><br><b>SO.5.2.NY.</b> Solid waste management facilities must meet specific pollution prevention requirements (6 NYCRR Section 360-1.14(b)). | <p>Verify that solid waste is disposed of at only one of the following:</p> <ul style="list-style-type: none"> <li>- a disposal facility exempt from the requirements of this section</li> <li>- a disposal facility authorized by the Department to accept the waste for disposal.</li> </ul> <p>Verify that hazardous waste and radioactive materials or waste are not treated or disposed of at a solid waste management facility.</p> <p>(NOTE: For a list of materials not considered solid waste by the State of New York, please see Appendix 9-1. For a list of facilities exempt from regulation by the State of New York, please see Appendix 9-2.)</p> <p>Verify that solid waste is not deposited in, and is prevented from, entering surface waters or groundwaters.</p> <p>Verify that all solid waste management facilities are constructed, operated, and closed in a manner minimizing the generation of leachate.</p> <p>Verify that leachate does not drain or discharge into surface water except under a State Pollutant Discharge Elimination System permit.</p> <p>Verify that leachate does not drain or discharge into groundwaters casing or contributing to contravention of established groundwater quality standards.</p> |

| <b>COMPLIANCE CATEGORY:<br/>SOLID WASTE MANAGEMENT<br/>New York Supplement</b>   |  |
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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>STATE-SPECIFIC<br/>REQUIREMENTS</b></p> <p><b>SO.6<br/>Permits/ Notifications/<br/>Exemptions</b></p> <p><b>SO.6.1.NY.</b> A permit or Departmental approval is required for construction, operation, modification, or expansion of a solid waste management facility (6 NYCRR Section 360-1.7(a)(1) and 360-1.8(h)).</p> <p><b>SO.6.2.NY.</b> Solid waste management facilities may qualify as registered facilities (6 NYCRR Section 360-1.8(h)(1) through (7)) [Citation Revised March 2004].</p> | <p>Verify that a solid waste management facility is constructed or operated only in accordance with a valid permit.</p> <p>Verify that a solid waste management facility is modified or expanded only with approval of the Department.</p> <p>(NOTE: Some facilities may be eligible for registration with the Department rather than having to obtain permits. The requirements for registered facilities are addressed separately.)</p> <p>(NOTE: Certain regulated solid waste management facilities may be eligible for registration rather than permit requirements, under prescribed thresholds and conditions. Registered facilities may not be exempt from other applicable requirements.)</p> <p>Verify that the solid waste management facility has validated copy of their registration.</p> <p>(NOTE: Registrations for appropriate facilities are generally valid for the life of the registered facility and may be transferred only upon prior written approval by the Department.)</p> |

| <b>COMPLIANCE CATEGORY:</b><br><b>SOLID WASTE MANAGEMENT</b><br><b>New York Supplement</b>   |   |
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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <b>STATE-SPECIFIC REQUIREMENTS</b><br><br><b>SO.7 Design</b><br><br><b>SO.7.1.NY.</b> Solid waste management facilities must meet specific design requirements (6 NYCRR Sections 360-1.14(o) and (t)). | <p>Verify that a shelter for routine maintenance and repair of mobile equipment is provided.</p> <p>Verify that, where operating personnel are required, the following facilities are provided:</p> <ul style="list-style-type: none"> <li>- adequately heated and lighted shelters</li> <li>- safe drinking water supply</li> <li>- sanitary toilet facilities</li> <li>- radio or telephone communication.</li> </ul> <p>(NOTE: These facilities are not required for composting facilities using aerated static pile or windrow techniques and land application facilities.)</p> |





| <b>COMPLIANCE CATEGORY:<br/>SOLID WASTE MANAGEMENT<br/>New York Supplement</b>   |   |
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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p>commercial operations (6 NYCRR Section 360-1.14(r)).</p> <p><b>SO.8.4.NY.</b> Solid waste management facilities must conduct self-inspections (6 NYCRR Sections 360-1.14(f)(3) and (h)).</p> <p><b>SO.8.5.NY.</b> Solid waste management facilities must meet specific recordkeeping requirements (6 NYCRR Sections 360-1.14(i) and (u)(1)) [Revised March 2004].</p> | <p>Verify that the facility frequently monitors and inspects itself for malfunctions, deterioration, operator errors, and discharges that may cause a release to the environment or a threat to human health.</p> <p>Verify that any deterioration or malfunction of equipment or structures or any other problems revealed by the inspections is promptly remedied.</p> <p>Verify that, where a hazard is imminent or has already occurred, remedial action is taken immediately.</p> <p>Verify that samples and measurements taken for monitoring are representative of the monitored activity and are conducted in an approved manner.</p> <p>Verify that the facility retains records of all unauthorized solid waste accepted, identifying the waste and its final disposition and summarizing this information in the annual report.</p> <p>Verify that the facility records self inspections in an inspection log, including the following information, and retains these logs for at least 7 yr from the date of inspection:</p> <ul style="list-style-type: none"> <li>- date and time of inspection</li> <li>- name of inspector</li> <li>- description of inspection including identity of specific equipment and structures inspected</li> <li>- observations recorded</li> <li>- date and nature of any remedial actions implemented or repairs made as a result of inspection.</li> </ul> <p>Verify that records of all data used to develop or support the permit application and any supplemental information submitted are kept throughout the active life and postclosure period of the facility.</p> <p>Verify that records pertaining to operation of the facility are kept for at least 7 yr from the date made or required to be made, whichever is later.</p> <p>Verify that records of all monitoring information, including the following, are retained for at least 7 yr from the date of sample analysis, measurement, report, or application:</p> |

| <b>COMPLIANCE CATEGORY:<br/>SOLID WASTE MANAGEMENT<br/>New York Supplement</b>  |  |
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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>SO.8.6.NY.</b> Solid waste management facilities must meet specific access requirements (6 NYCRR Sections 360-1.14(c), (d), (n), and (v)).</p> <p><b>SO.8.7.NY.</b> Solid waste management facilities must meet specific health and safety requirements (6 NYCRR Sections 360-1.14(j) through (m) and (s)).</p> | <ul style="list-style-type: none"> <li>- calibration and maintenance records</li> <li>- original strip chart recordings for continuous monitoring instrumentation</li> <li>- all required reports.</li> </ul> <p>Verify that monitoring records include the following information:</p> <ul style="list-style-type: none"> <li>- date, exact place, and time of sampling or measurements</li> <li>- name of the individual who performed sampling and measurement</li> <li>- date analyses were performed</li> <li>- name of individual who performed the analyses</li> <li>- analytical techniques or methods used</li> <li>- result of such analyses</li> <li>- internal laboratory quality assurance and control.</li> </ul> <p>Verify that existing water quality records are kept throughout the active life and postclosure period of the facility.</p> <p>Verify that the facility operator, during all hours of operation, has available a copy of the permit, a copy of the operation and maintenance report, the contingency plan, and the most recent annual report.</p> <p>Verify that public access to the facility and receipt of solid waste occurs only when an attendant is on duty.</p> <p>(NOTE: This requirement regarding an attendant does not apply to facilities such as transfer stations without permanent operating mechanical equipment.)</p> <p>Verify that access to and use of the facility is strictly and continuously controlled by fencing, gates, signs, natural barriers, or other suitable means.</p> <p>Verify that onsite roads and other throughways are passable and safe at all times.</p> <p>Verify that salvaging, if permitted, is controlled within a designated salvage area and does not interfere with operations or create hazards or nuisances.</p> <p>Verify that blowing litter is confined to solid waste holding and operating areas by fencing or other suitable means.</p> <p>Verify that solid waste is confined to an area that can be effectively maintained, operated, and controlled, and solid waste is not accepted unless it is adequately covered or confined in the transport vehicle.</p> <p>Verify that dust and odors are effectively controlled so as not to constitute a nuisance or hazard to health, safety, or property.</p> <p>Verify that the facility is maintained so as to prevent or control onsite populations</p> |

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| <p><b>SO.8.8.NY.</b> Solid waste management facilities must meet specific noise level requirements (6 NYCRR Sections 360-1.14(p)).</p>             | <p>of vectors using techniques appropriate for protection of human health and environment.</p> <p>Verify that telephone numbers to emergency response agencies, such as the local police department, fire department, ambulance, and hospital, are conspicuously posted in all areas where telephones are available.</p> <p>Verify that noise levels resulting from equipment or operations at the facility are controlled to prevent transmission of sound levels beyond the property line at locations zoned or otherwise authorized for residential purposes to exceed the following Leq energy equivalent sound levels:</p> <ul style="list-style-type: none"> <li>- in rural communities, 57 decibels (A) from 7 am to 10 pm and 47 decibels (A) from 10 pm to 7 am</li> <li>- in suburban communities, 62 decibels (A) from 7 am to 10 pm and 52 decibels (A) from 10 pm to 7 am</li> <li>- in urban communities, 67 decibels (A) from 7 am to 10 pm and 57 decibels (A) from 10 pm to 7 am.</li> </ul> <p>(NOTE: The Leq is the equivalent steady-state sound level that contains the same acoustic energy as the time varying sound level during a one-hour period. It is not necessary that the measurements be taken over a full one-hour time interval, but sufficient measurements must be available to allow a valid extrapolation to a one-hour time interval.)</p> <p>Verify that, if the background residual sound level (excluding any contributions from the solid waste management facility) exceeds these limits, the facility does not produce a Leq exceeding that background.</p> <p>Verify that sound level is the weighted sound pressure level measured with the slow metering characteristic and A-weighted.</p> <p>Verify that the measuring instruments are Type 1 general purpose sound level meters, Type 2, or corresponding special sound level meters Type S1A or S2A.</p> <p>Verify that each piece of internal combustion-powered equipment used at the facility has a muffler.</p> <p>Verify that sound levels for all internal combustion-powered equipment do not exceed 80 decibels (A) at a distance of 50 ft from the operating equipment.</p> |
| <p><b>SO.8.9.NY.</b> Registered solid waste management facilities must meet specific reporting requirements (6 NYCRR Section 360-1.8(h)(8) and</p> | <p>Verify that a registered facility submits an annual report to the Department's Central Office and the Office of the Department administering the region in which the facility is located, no later than 60 days after the first day of January following each year of operation.</p>  |

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| <p>360-1.14(i)(1)) [Revised March 2003; Citation Revised March 2004].</p>  | <p>Verify that the report includes the following at a minimum:</p> <ul style="list-style-type: none"> <li>- the total annual amount of waste received by weight or volume, compiled by type and quantity received during each calendar quarter</li> <li>- the origin of the waste received</li> <li>- the destination of the waste removed</li> <li>- the weight or volume and type of each material recovered</li> <li>- description of any problems encountered and methods for resolution</li> <li>- any changes in operation that has occurred in the previous year.</li> </ul> <p>Verify that summaries of unauthorized solid waste accepted identify the waste and its final disposition are included in the annual report.</p> <p>Verify that the summaries include the date solid waste was received, the type of solid waste received, the date of disposal, the disposal method and location.</p> |
| <p><b>SO.8.10.NY.</b> Registered solid waste management facilities must meet specific pollution prevention requirements (6 NYCRR Section 360-1.8(h)(9) and 360-1.14(b)) [Citation Revised March 2004].</p> | <p>Verify that solid waste is not deposited in, and is prevented from entering, surface waters or groundwaters.</p> <p>Verify that all solid waste management facilities are constructed, operated, and closed in a manner minimizing the generation of leachate.</p> <p>Verify that leachate does not drain or discharge into surface water except under a State Pollutant Discharge Elimination System permit.</p> <p>Verify that leachate does not drain or discharge into groundwaters casing or contributing to contravention of established groundwater quality standards.</p>  |
| <p><b>SO.8.11.NY.</b> Registered solid waste management facilities must control access (6 NYCRR Section 360-1.8(h)(9) and 360-1.14(d)) [Citation Revised March 2004].</p>                                  | <p>Verify that access to and use of the facility is strictly and continuously controlled by fencing, gates, signs, natural barriers, or other suitable means.</p>   |
| <p><b>SO.8.12.NY.</b> Registered solid waste management facilities must have a control program to assure that only authorized waste is accepted (6 NYCRR Section 360-1.8(h)(9) and 360-1.14(e))</p>        | <p>Verify that the facility has initiated a control program to assure only solid waste authorized by the Department is being treated, disposed of, or transferred there.</p> <p>Verify that a program is in place to teach staff to recognize, remove, and report receipt of unauthorized solid waste.</p> <p>Verify that, if unauthorized waste is accepted, it is removed, secured, segregated and a record identifying the waste and its final disposition is sent to the</p>  |

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| <p>[Revised March 2004].</p> <p><b>SO.8.13.NY.</b> Registered solid waste management facilities must meet recordkeeping requirements (6 NYCRR Section 360-1.8(h)(9) and 360-1.14(i)) [Revised March 2004].</p> | <p>Department.</p> <p>Verify that unauthorized waste is removed from the facility as soon as practicable, but no later than 90 days after discovery.</p> <p>Verify that the facility retains records of all unauthorized solid waste accepted, identifying the waste and its final disposition and summarizing this information in the annual report.</p> <p>Verify that the facility records self inspections in an inspection log, including the following information, and retains these logs for at least 7 yr from the date of inspection:</p> <ul style="list-style-type: none"> <li>- date and time of inspection</li> <li>- name of inspector</li> <li>- description of inspection including identity of specific equipment and structures inspected</li> <li>- observations recorded</li> <li>- date and nature of any remedial actions implemented or repairs made as a result of inspection.</li> </ul> <p>Verify that records of all data used to develop or support the permit application and any supplemental information submitted are kept throughout the active life and postclosure period of the facility.</p> <p>Verify that records pertaining to operation of the facility are kept for at least 7 yr from the date made or required to be made, whichever is later.</p> <p>Verify that records of all monitoring information, including the following, are retained for at least 7 yr from the date of sample analysis, measurement, report, or application:</p> <ul style="list-style-type: none"> <li>- calibration and maintenance records</li> <li>- original strip chart recordings for continuous monitoring instrumentation</li> <li>- all required reports.</li> </ul> <p>Verify that monitoring records include the following information:</p> <ul style="list-style-type: none"> <li>- date, exact place, and time of sampling or measurements</li> <li>- name of the individual who performed sampling and measurement</li> <li>- date analyses were performed</li> <li>- name of individual who performed the analyses</li> <li>- analytical techniques or methods used</li> <li>- result of such analyses</li> <li>- internal laboratory quality assurance and control.</li> </ul> <p>Verify that existing water quality records are kept throughout the active life and</p> |

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| <p><b>SO.8.14.NY.</b> Registered solid waste management facilities must meet specific health and safety requirements (6 NYCRR Sections 360-1.8(h) and 360-1.14(j) through (m) and (s)) [Revised March 2004].</p> | <p>postclosure period of the facility.</p> <p>Verify that blowing litter is confined to solid waste holding and operating areas by fencing or other suitable means.</p> <p>Verify that solid waste is confined to an area that can be effectively maintained, operated, and controlled, and solid waste is not accepted unless it is adequately covered or confined in the transport vehicle.</p> <p>Verify that dust and odors are effectively controlled so as not to constitute a nuisance or hazard to health, safety, or property.</p> <p>Verify that the facility is maintained so as to prevent or control onsite populations of vectors using techniques appropriate for protection of human health and environment.</p> <p>Verify that telephone numbers to emergency response agencies, such as the local police department, fire department, ambulance, and hospital, are conspicuously posted in all areas where telephones are available.</p>   |
| <p><b>SO.8.15.NY.</b> [Moved March 2004].</p>  | <p>(NOTE: Checklist item combined with SO.8.14.NY.)</p>  |
| <p><b>SO.8.16.NY.</b> Registered solid waste management facilities must meet specific noise level requirements (6 NYCRR Sections 360-1.8(h)(9) and 360-1.14(p)).</p>   | <p>Verify that noise levels resulting from equipment or operations at the facility are controlled to prevent transmission of sound levels beyond the property line at locations zoned or otherwise authorized for residential purposes to exceed the following Leq energy equivalent sound levels:</p> <ul style="list-style-type: none"> <li>- in rural communities, 57 decibels (A) from 7 am to 10 pm and 47 decibels (A) from 10 pm to 7 am</li> <li>- in suburban communities, 62 decibels (A) from 7 am to 10 pm and 52 decibels (A) from 10 pm to 7 am</li> <li>- in urban communities, 67 decibels (A) from 7 am to 10 pm and 57 decibels (A) from 10 pm to 7 am.</li> </ul> <p>(NOTE: The Leq is the equivalent steady-state sound level that contains the same acoustic energy as the time varying sound level during a one-hour period. It is not necessary that the measurements be taken over a full one-hour time interval, but sufficient measurements must be available to allow a valid extrapolation to a one-hour time interval.)</p> <p>Verify that, if the background residual sound level (excluding any contributions from the solid waste management facility) exceeds these limits, the facility does</p> |

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| <b>SO.8.17.NY.</b> [Moved March 2004].   | <p>not produce a Leq exceeding that background.</p> <p>Verify that sound level is the weighted sound pressure level measured with the slow metering characteristic and A-weighted.</p> <p>Verify that the measuring instruments are Type 1 general purpose sound level meters, Type 2, or corresponding special sound level meters Type S1A or S2A.</p> <p>Verify that mufflers are required on all internal combustion-powered equipment used at the facility.</p> <p>Verify that sound levels for all internal combustion-powered equipment do not exceed 80 decibels (A) at a distance of 50 ft from the operating equipment.</p> <p>(NOTE: Checklist item combined with SO.8.14.NY.)</p> |



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| <p><b>STATE-SPECIFIC<br/>REQUIREMENTS</b></p> <p><b>SO.9<br/>Specific Wastes</b></p> <p><b>SO.9.1.NY.</b> Registered solid waste management facilities must have approval for the management of specific waste (6 NYCRR Sections 360-1.8(h)(9) and 360-1.14(r)) [Citation Revised March 2004].</p> <p><b>SO.9.2.NY.</b> All dental amalgam waste must meet storage requirements (6 NYCRR 374-4.2(b)) [Added March 2007].</p> <p><b>SO.9.3.NY.</b> All dental amalgam waste and elemental mercury generated by a dental facility must be sent for mercury recycling (6 NYCRR 374-4.2(c)) [Added March 2007].</p> | <p>Verify that that the Department has specifically approved the management of solid waste resulting from industrial or commercial operations or sludge and septage.</p> <p>(NOTE: This checklist item repeated at WA.81.2.NY.; see WA.81.NY. for related requirements.)</p> <p>Verify that all dental amalgam wastes is collected and stored in air-tight, leak-proof and structurally sound containers.</p> <p>Verify that the containers holding the dental amalgam waste have a label that includes, at a minimum, the type of the dental amalgam waste contained and the date waste was initially placed in the container.</p> <p>Verify that the containers holding the dental amalgam waste tightly closed except when adding or removing dental amalgam waste.</p> <p>Verify that the length of storage of dental amalgam waste within the dental facility does not exceed one year from the date waste was initially placed in the container.</p> <p>(NOTE: This checklist item repeated at WA.81.3.NY.; see WA.81.NY. for related requirements.)</p> <p>Verify that all dental amalgam waste and elemental mercury generated by the dental facility is sent for mercury recycling.</p> <p>Verify that written or electronic certification from the collection service or recycler is obtained by the dental facility, documenting:</p> <ul style="list-style-type: none"> <li>- the name and address of the collection service</li> <li>- the amount, by weight, of dental amalgam waste and elemental mercury collected and the date it was collected</li> <li>- the name and address of the facility where the dental amalgam waste and</li> </ul> |

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|  | elemental mercury will ultimately be recycled, and certification that the mercury contained in the waste was destined for recycling. |

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| <p><b>SO.15.</b></p> <p><b>TRANSFER FACILITIES</b></p> <p><b>SO.15.1.NY.</b> Solid waste transfer stations must meet specific operating requirements (6 NYCRR Sections 360-11.4(a) through (g), (k), and (l)).</p> <p><b>SO.15.2.NY.</b> Solid waste transfer stations must meet specific recordkeeping requirements (6 NYCRR</p> | <p>Verify that only household waste and commercial waste are accepted.</p> <p>Verify that the following wastes are accepted only with approval of the Department:</p> <ul style="list-style-type: none"> <li>- industrial waste</li> <li>- treated or untreated regulated medical waste (RMW)</li> <li>- treated and destroyed medical waste (TDMW)</li> <li>- construction and demolition debris.</li> </ul> <p>Verify that a sign is posted with the hours of operation and types of solid waste accepted and not accepted.</p> <p>Verify that a station with permanent operating mechanical equipment has an attendant on duty whenever it is open.</p> <p>Verify that a neat and orderly appearance is maintained and blowing litter, insects, and other nuisances are controlled.</p> <p>Verify that the station and transfer vehicles are cleaned to prevent odors and vectors.</p> <p>Verify that all floors are free from standing water.</p> <p>Verify that all drainage from cleaning areas is discharged to sanitary sewers, authorized sanitary waste treatment facilities, or a corrosion-resistant holding tank.</p> <p>Verify that disposal of leachate and drainage from cleaning areas and holding tanks meets all applicable Federal and state requirements.</p> <p>Verify that the station has adequate storage space for incoming solid waste.</p> <p>Verify that adequate fire protection equipment is available at all times.</p> <p>Verify that all putrescible solid waste is removed whenever transfer containers are full, or within 7 days of receipt, whichever comes first.</p> <p>Verify that operational records are maintained at stations with permanent operating mechanical equipment, including a daily log of the following information:</p> |

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| <p>Sections 360-11.4(i) and (j)).</p> <p><b>SO.15.3.NY.</b> Solid waste transfer stations accepting asbestos waste must meet specific management requirements (6 NYCRR Sections 360-11.4(m)(1) through (3)) [Added January 1998].</p> <p><b>SO.15.4.NY.</b> Solid waste transfer stations accepting asbestos waste must meet</p> | <ul style="list-style-type: none"> <li>- the quantity of solid waste received and transported</li> <li>- origin and destination of solid waste transported daily.</li> </ul> <p>Verify that an annual report is submitted to the Department's central office and the office of the Department administering the region in which the station is located, no later than 60 days after the first day of January following each year of operation.</p> <p>Verify that the report contains the following information:</p> <ul style="list-style-type: none"> <li>- total annual amount of waste received by weight or volume, compiled by waste type</li> <li>- total quantity of solid waste received during each quarter</li> <li>- origin of the solid waste</li> <li>- destination of the solid waste</li> <li>- weight or volume and type of each material recovered</li> <li>- any changes in operation that has occurred in the previous year.</li> </ul> <p>Verify that the Department has approved the acceptance of asbestos waste prior to its acceptance at a transfer station facility.</p> <p>(NOTE: The asbestos waste must have been removed and packaged in accordance with 40 CFR Part 61, Subparts A and M, and 29 CFR Parts 1910 and 1926.)</p> <p>Verify that all transfer of asbestos waste is conducted in an enclosed structure.</p> <p>Verify that open air vehicle-to-vehicle transfer of asbestos waste does not occur.</p> <p>Verify that enclosed structures are provided with systems to minimize the discharge of asbestos to the environment using the best available control technology (BACT).</p> <p>(NOTE: Any air contamination point-source that is created as a result of such BACT system must obtain a permit pursuant to Part 201 of this Title. Any point source discharge of wastewater from such facility must be authorized pursuant to Parts 750 - 757 of this Title.)</p> <p>Verify that the engineering report for the facility includes detailed operation procedures for careful handling and transferring the asbestos waste in a manner that will avoid fiber release and damage to the containers.</p> <p>Verify that compaction of asbestos at a transfer station is prohibited.</p> <p>Verify that the contingency plan includes a procedure to contain spills or discharges of asbestos waste from broken or damaged containers; and a procedure to decontaminate vehicles and other equipment or appurtenances that may have</p> |

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| <p>specific contingency plan and training requirements (6 NYCRR Sections 360-11.4(m)(4) and (5)) [Added January 1998].</p> <p><b>SO.15.5.NY.</b> Solid waste transfer stations receiving more than 50,000 cubic yards or 12,500 tons must meet additional operational requirements (6 NYCRR Sections 360-11.4(n)) [Added January 1998].</p> | <p>become contaminated with asbestos waste from a spill, discharge, or occurrence.</p> <p>Verify that training specific to handling asbestos waste is provided for all individuals involved in the operation of the facility.</p> <p>Verify that the training is provided as soon as possible after individuals are employed at the facility and be completed before these individuals are allowed to handle asbestos waste.</p> <p>(NOTE: The training program must either meet the New York State Department of Labor asbestos waste training and education requirements contained in 12 NYCRR Part 56 or be approved by the New York State Department of Health.)</p> <p>Verify that all processing, tipping, sorting, storage, compaction, and related activities are conducted in an enclosed or covered area.</p> <p>Verify that solid waste delivered to the facility is weighed or otherwise measured before unloading.</p> <p>Verify that the processing area is cleaned each day by washing or other appropriate method to prevent odors and other nuisance conditions with all residuals properly removed and disposed.</p> |

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| <p><b>SO.20.</b></p> <p><b>TRANSPORTATION</b></p> <p><b>SO.20.1.NY.</b> The transportation of regulated wastes is required to be permitted by the Department (6 NYCRR Sections 364.1(e)(3), 364.2(a) and (c)) [Revised January 1998; Citation Revised March 2004].</p> <p><b>SO.20.2.NY.</b> Transporters of regulated wastes must meet documentation and reporting requirements (6 NYCRR Section 364.6(a), (b), and (e),) [Revised January 1998].</p> | <p>(NOTE: For the purposes of this section, regulated wastes include any solid waste that is raw sewage, septage, sludge from a sewage or water supply treatment plant, waste oil, or industrial-commercial waste.)</p> <p>Verify that a transporter of regulated wastes has obtained a valid permit from the Department.</p> <p>(NOTE: The transporter of regulated waste is not required to obtain a permit if the transporter has contracted with a generator who has been issued a permit, provided that:</p> <ul style="list-style-type: none"> <li>- the transporter is designated on the generator's transporter permit as a waste transporter contracted to transport the generator's regulated waste</li> <li>- the transporter does not transport any regulated waste other than those specified on the generator's permit while operating under the provisions of the permit</li> <li>- the transporter does not dispose of, deliver or otherwise relinquish possession of any generator's regulated waste to any place other than that designated in the generator's permit.)</li> </ul> <p>(NOTE: The following are included in the small quantity waste transporter exemption:</p> <ul style="list-style-type: none"> <li>- any generator who is exempt from the requirements of Part 372 of this Title, pursuant to section 372.1(e)(1), and who transports less than a total of 220 pounds (100 kilograms) of hazardous waste or less than 2.2 pounds (1 kilogram) of acute hazardous waste during any consecutive 30-day period is exempt from the requirements of this Part, provided that the wastes are generated and transported exclusively by the generator</li> <li>- any person who transports less than 500 pounds of nonhazardous industrial/commercial waste, other than regulated medical waste, in any single shipment is exempt from the requirements of this Part.)</li> </ul> <p>(NOTE: See Appendix 9-3 for additional exemptions.)</p> <p>(NOTE: For the purposes of this section, regulated wastes include any solid waste that is raw sewage, septage, sludge from a sewage or water supply treatment plant, waste oil, or industrial-commercial waste.)</p> <p>Verify that the operator of a vehicle transporting regulated wastes carries the original permit or a legible photocopy of the permit in the vehicle.</p> <p>Verify that the transporter of regulated waste can present the permit, together with shipping or transporting documents relative to the waste being transported, to</p> |

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| <p><b>SO.20.3.NY.</b> Transporters of regulated wastes must meet operational requirements (6 NYCRR Section 364.6(c), (d), (f) through (i),) [Revised January 1998].</p> | <p>authorized representatives of the Department or to any law enforcement officers when requested to do so.</p> <p>Verify that a report is submitted to the Department annually, or more frequently if the Department deems necessary, on forms prescribed by the Department.</p> <p>Verify that the records on which reports are based are retained for at least 3 yr.</p> <p>Verify that records are made available, upon request, to the Department during normal business hours.</p> <p>(NOTE: For the purposes of this section, regulated wastes include any solid waste that is raw sewage, septage, sludge from a sewage or water supply treatment plant, waste oil, or industrial-commercial waste.)</p> <p>Verify that the operator remains with the vehicle while it is being filled or discharged.</p> <p>Verify that all wastes are properly contained during transport so as to prevent leaking, blowing, or any other type of discharge into the environment.</p> <p>Verify that all applicable state and Federal laws, rules, and regulations are complied with.</p> <p>(NOTE: The permittee is responsible for all requirements for all vehicles, including leased vehicles operated under his permit.)</p> <p>Verify that every vehicle is conspicuously marked or placarded in a manner consistent with state and Federal requirements related to the transportation of the regulated waste and its principle hazard.</p> <p>Verify that the marking meet the following requirements:</p> <ul style="list-style-type: none"> <li>- are durable, in English, and printed on or affixed to the surface of a package or on a label, tag, or sign</li> <li>- are displayed on a background of sharply contrasting color</li> <li>- are unobscured by labels or attachments</li> <li>- are located away from any other marking (such as advertising) that could substantially reduce its effectiveness.</li> </ul> <p>Verify that vehicles are restricted to the transportation of materials not intended for human or animal consumption or for other use by the general public except when properly cleaned in accordance with all applicable Federal and state regulations governing decontamination.</p> |

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| <b>SO.25.</b><br><br><b>RECYCLING</b><br><br><b>SO.25.1.NY.</b> [Moved March 2005].        | <br><br><br><br><br><br><br><br><br><br>(NOTE: Moved to SO.92.NY., March 2005.) |



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| <b>MUNICIPAL SOLID WASTE LANDFILLS</b><br><br><b>SO.67. Emissions</b><br><br><b>SO.67.1.NY.</b> All landfill gas recovery facilities (LGRF) must have a permit for operation (6 NYCRR Section 360-2.16) [Added January 2000; Citation Revised March 2004].<br><br><b>SO.67.2.NY.</b> Municipal solid waste landfills must meet time limits record keeping requirements for landfill gas collection and control systems (6 NYCRR Section 208.1 and 208.9(b)) [Added January 2000; Citation Revised March 2004]. | <p>(NOTE: The requirements for LGRF are essentially the same as the Federal requirements. The requirements must be met if the landfill has commenced construction, reconstruction, or modification or accepted waste at any time since 8 November 1987, or has additional design capacity available for future waste deposition. Modification means an increase in the design capacity of the landfill by either lateral or vertical expansion based on design capacity as of 31 May 1991.)</p> <p>Verify that all LGRF's existing on 21 November 1998 have a permit.</p> <p>Verify that the conditions of the permit are met.</p> <p>(NOTE: The requirements for landfill gas collection and control systems for MSW landfills is basically the same as the Federal requirements found in 60.750 through 60.759. The requirements must be met if the landfill has commenced construction, reconstruction, or modification or accepted waste at any time since 8 November 1987.)</p> <p>Verify that the records required in SO.67.8.US. are maintained for 7 years.</p> <p>Verify that records of the control device vendor specifications are maintained until removal.</p> |

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| <p><b>SO.92.</b></p> <p><b>ASH HANDLING AND DISPOSAL</b></p> <p><b>SO.92.1.NY.</b> Facilities generating coal combustion ash must submit a report to the Department (6 NYCRR Section 360-1.15(c)).</p> | <p>(NOTE: Moved from SO.25.1.NY., March 2005.)</p> <p>Verify that the facility submits a report no later than 60 days after 1 January following each year of operation identifying the following:</p> <ul style="list-style-type: none"> <li>- quantities of coal combustion bottom ash, fly ash, and gas scrubbing byproducts were generated</li> <li>- with respect to coal combustion bottom ash: <ul style="list-style-type: none"> <li>- how much was sent to a manufacturer of roofing shingles or asphalt products</li> <li>- how much was used as a traction agent on roadways, parking lots, and other driving surfaces</li> <li>- how much was sent to a manufacturer of cement, concrete, or concrete products</li> <li>- how much was used as structural fill</li> </ul> </li> <li>- with respect to coal combustion fly ash and to gas scrubbing byproducts: <ul style="list-style-type: none"> <li>- how much was used to produce lightweight block, lightweight aggregate, low strength backfill material (flowable fill), manufactured gypsum, or manufactured calcium chloride.</li> </ul> </li> </ul> |

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| <p><b>SO.95.</b></p> <p><b>RESOURCE RECOVERY FACILITIES</b></p> <p><b>SO.95.1.NY.</b> Recyclables handling and recovery facilities must be permitted as solid waste management facilities (6 NYCRR Section 360-12.1) [Revised March 2004].</p> | <p>Verify that recyclables handling and recovery facilities are either exempt or permitted by the Department.</p> <p>(NOTE: In addition to the exemptions granted in Appendix 1-2, the following facilities are also exempt from these requirements:</p> <ul style="list-style-type: none"> <li>- returnable beverage container redemption operations conducted at a dealer, distributor, or redemption center</li> <li>- manufacturing facilities</li> <li>- buy-back centers (a facility that purchases source separated, nonputrescible, recyclables from the public and accepts no other solid waste materials)</li> <li>- waste tire retreaders and processing of waste tires for energy recovery onsite</li> <li>- an intermediate processor, provided all solid waste handled at the facility is sent for recycling or disposed of appropriately.)</li> </ul> <p>(NOTE: Automobile dismantlers, scrap metal processors, automobile junkyards, facilities that recover metal from sludges that are not hazardous waste, and metal salvage facilities are exempt, except as follows:</p> <ul style="list-style-type: none"> <li>- an annual report must be provided to the Department that details how the waste fluids (including, but not limited to, refrigerants, oil, and transmission fluids) are disposed</li> <li>- duplicate originals of this report must be submitted to the department's central office and the office of the department administering the region</li> <li>- the report must be submitted no later than 60 days after the first day of January.)</li> </ul> <p>Verify that facilities which separate recyclables from solid waste, other than from source separated recyclables or construction and demolition debris, comply with the following requirements:</p> <ul style="list-style-type: none"> <li>- obtain a permit to construct and operate as a transfer facility</li> <li>- comply with all applicable operational requirements for recyclables handling and recovery facilities (except for the requirement to receive only recyclable materials)</li> <li>- comply with all other applicable solid waste requirements.)</li> </ul> <p>(NOTE: Facilities may be eligible for registration with the Department rather than permitting if the facility exclusively handles source separated, nonputrescible solid waste and generates less than 2 tons or 15 percent of their average intake per day (whichever is greater) as residue based on a full year of operation. However, these registered facilities must comply with operation requirements (see SO.95.2.NY. through SO.95.4.NY.) .</p> |

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| <p><b>SO.95.2.NY.</b> Recyclables handling and recovery facilities must be operated according to specific requirements (6 NYCRR Sections 360-12.2(a)).</p>           | <p>Verify that the facility receives only source separated nonputrescible recyclables that may be further processed.</p> <p>Verify that external storage of paper and other recyclables whose marketability may be adversely affected by exposure to the sun or weather conditions is stored in covered containers or in a manner otherwise acceptable to the Department.</p> <p>Verify that solid waste separated for recycling is stored separately and maintained in a safe, sanitary and orderly manner to ensure its marketability is not adversely affected.</p> <p>Verify that solid waste which the facility does not intend to recover and which does not contain putrescible material is stored for a period not to exceed 2 weeks unless otherwise acceptable to the Department.</p> <p>Verify that solid waste or recyclables are not stored at the facility in such a manner that they become a nuisance or a sanitary or environmental problem.</p> <p>Verify that the site and facility have adequate drainage, are drained, and are free of standing water.</p> <p>Verify that all solid waste passing through the facility is ultimately recycled or disposed of at a solid waste management facility authorized by the Department, if in this state, or by the appropriate governmental agency or agencies if located in other states, territories, or nations.</p> <p>Verify that any refrigerants are properly removed and managed prior to crushing or shredding of the materials.</p> <p>Verify that incidental putrescibles or putrescible residues are stored for a period not exceeding 1 week.</p> <p>Verify that all indoor and outdoor storage, handling, and tipping areas include appropriate fire detection and protection equipment and are accessible by fire fighting equipment.</p> |
| <p><b>SO.95.3.NY.</b> Recyclables handling and recovery facilities must meet storage limitations and access restrictions (6 NYCRR Sections 360-12.2(b) and (c)).</p> | <p>Verify that nonputrescible recyclables are not stored longer than 60 days.</p> <p>(NOTE: Recyclables may be stored for a longer period of time with Department approval if the Department determines:</p> <ul style="list-style-type: none"> <li>- there is a demonstrated need to do so (such as a market agreement with terms of receipt based on greater than 60-day intervals or volumes that may take longer than 60 days to acquire)</li> <li>- there is sufficient Department-approved storage area</li> <li>- an inventory methodology including a daily log system is used to ensure that the recyclables do not remain on the facility site for longer than specified</li> </ul>  |

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| <p><b>SO.95.4.NY.</b> Recyclables handling and recovery facilities must meet recordkeeping requirements (6 NYCRR Sections 360-12.2(d)).</p> | <p>- the inventory methodology is provided to and approved by the Department before storage begins.)</p> <p>Verify that the owner or operator restricts the presence of, and minimizes the possibility for, any unauthorized entry onto the facility.</p> <p>(NOTE: Any person entering the facility during regular business hours must be directed to report to the facility office by appropriate signs located at facility entrances and other locations in sufficient number to be seen from any approach to the facility. In the case of facilities allowing local residents to bring in materials, a designated area to do so must be provided in order to minimize potential accidents and unauthorized entry.)</p> <p>Verify that, in addition to any other recordkeeping requirements that may apply to the recyclables handling and recovery facility as a solid waste management facility, the facility prepares and file an annual report that includes, but is not be limited to:</p> <ul style="list-style-type: none"> <li>- the total annual amount of waste received by weight or volume, compiled by type and quantity received during each calendar quarter</li> <li>- the origin of the waste received</li> <li>- the destination of the waste removed</li> <li>- the weight or volume and type of each material recovered</li> <li>- a description of any problems encountered and methods for resolution and any changes in operation that have occurred in the previous year.</li> </ul> <p>Verify that, for facilities that are registered rather than permitted, the owner/operator maintains daily records for facility monitoring.</p> |

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| <b>MEDICAL WASTE</b><br><br><b>SO.105.<br/>Generators</b><br><br><b>SO.105.1.NY.</b> Generator of medical waste must meet specific requirements (6 NYCRR Section 364.9(e)(1) and (7)) [Revised March 2005].<br><br><b>SO.105.2.NY.</b> Generators of regulated medical waste who transport or offer the waste for transport for offsite treatment or disposal must prepare a tracking form (6 NYCRR Sections 364.9(e)(3), (5)(i)(a) and (6)) [Revised March 2008]. | <p>(NOTE: See Appendix 9-4 for exempted medical waste.)</p> <p>Verify that the generator determines whether its medical waste is regulated medical waste</p> <p>Verify that the generator of regulated medical waste determines the quantity generated in a calendar month and transported or offered for transport offsite for treatment, destruction, or disposal.</p> <p>Verify that the generator prepares a report annually on forms prescribed by the Department.</p> <p>(NOTE: While the Department no longer requires that the report be submitted, the information required should be retained.)</p> <p>(NOTE: This checklist item moved here from SO.110.4.NY.; January 1999.)</p> <p>Verify that the generator prepares a tracking form with a copy for the generator, each transporter, each intermediate handler, and two for the destination facility.</p> <p>Verify that the generator signs the certification statement on the tracking form by hand, obtains the handwritten signature of the initial transporter and date of acceptance on the form, and retains one copy.</p> <p>Verify that a copy of each tracking form is kept for at least 3 yr from the date the waste was accepted by the initial transporter.</p> <p>Verify that the generator contacts the owner or operator of the destination facility, transporter(s), and intermediate handler(s), as appropriate, to determine the status of any tracked waste if he does not receive a copy of the completed tracking form with the handwritten signature of the owner or operator of the destination facility within 35 days of the date the waste was accepted by the initial transporter.</p> <p>Verify that the generator submits an Exception Report, as described below, to the regional office of the Department having jurisdiction over the county in which the generator is located if he has not received a completed copy of the tracking form signed by the owner or operator of the destination facility within 45 days of the date the waste was accepted by the initial transporter.</p> |







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|  | <p>pails, cartons, drums, or portable bins.</p> <p>Verify that the containment system (i.e., pail, carton, drum, or portable bin) meets the following criteria:</p> <ul style="list-style-type: none"> <li>- is leakproof</li> <li>- has tight-fitting covers</li> <li>- kept clean and in good repair</li> <li>- are conspicuously labeled with the word <b>INFECTIOUS</b> or <b>REGULATED MEDICAL WASTE</b>.</li> </ul> <p>Verify that the outermost surface of the containment system is marked with a water-resistant identification tag containing the following information:</p> <ul style="list-style-type: none"> <li>- generator's or intermediate handler's name</li> <li>- generator's or intermediate handler's address</li> <li>- transporter's name</li> <li>- transporter's state permit or identification number, or if not applicable, the transporter's address</li> <li>- date of shipment</li> <li>- identification of contents as medical waste.</li> </ul> <p>(NOTE: The containment system may be of any color.)</p> <p>Verify that inner containers of the containment system, including red bags, sharps, and fluid containers, are marked with indelible ink or imprinted with water-resistant tags containing the following information:</p> <ul style="list-style-type: none"> <li>- generator's or intermediate handler's name</li> <li>- generator's or intermediate handler's address.</li> </ul> |
| <p><b>SO.110.3.NY.</b> Generators of regulated medical waste must meet specific requirements when using reusable containers (6 NYCRR Section 364.9(d)(4)) [Citation Revised March 2004].</p> | <p>Verify that all nonrigid packaging and inner liners are managed as regulated medical waste and are not reused.</p> <p>Verify that any container used for storage and/or transport of regulated medical waste, and designated for reuse once emptied, are decontaminated if the container shows signs of visible contamination.</p> <p>Verify that, if any container used for storage and/or transport is not capable of being rendered free of any visible signs of contamination, the container is managed (labeled, marked, and treated and/or disposed of) as regulated medical waste.</p>   |
| <p><b>SO.110.4.NY.</b> [Moved January 1999].</p>   | <p>(NOTE: This checklist item moved to SO.105.2.NY.)</p>   |

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| <p><b>MEDICAL WASTE</b></p> <p><b>SO.115.<br/>Transportation</b></p> <p><b>SO.115.1.NY.</b> Transporters of any medical waste must have a permit (6 NYCRR Section 364.9(g)(3)) [Revised March 2004].</p> | <p>Verify that the transporters of any regulated medical waste have a permit</p> <p>(NOTE: No permit is required for the transportation by the generator of less than 50 pounds per month of required medical waste or by authorized employees of such generator acting on behalf of and under the supervision of the generator provided:</p> <ul style="list-style-type: none"> <li>- the waste is being transported from the point of generation for treatment of disposal to a approved facility</li> <li>- the generator registers with the Department.)</li> </ul> <p>(NOTE: Vehicles transporting regulated medical waste, such as an emergency rescue vehicle, a blood service collection vehicle or a vehicle operated by a public health nurse in the conduct of routine business, where the transportation of such waste is incidental to the primary function of the vehicle do not require a permit wherever the waste is transported to a central collection facility which shall be considered to be the point of generation.)</p> |

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| <p><b>MEDICAL WASTE</b></p> <p><b>SO.120.<br/>Treatment/ Disposal</b></p> <p><b>SO.120.1.NY.</b> On-site incineration of medical waste must meet specific requirements (6 NYCRR Sections 364.9(f)) [Added March 2004].</p> | <p>(NOTE: See AE.30.1.NY. through AE.30.8.NY. for additional medical waste incinerator regulations. These regulations apply to generators of regulated medical waste who incinerate regulated medical waste on-site.)</p> <p>Verify that generators of regulated medical waste who incinerate the waste on-site and who accept regulated medical waste accompanied by a tracking form comply with tracking form requirements.</p> <p>Verify that generators keep an operating log at their incineration facility that includes the following information:</p> <ul style="list-style-type: none"> <li>- the date each incineration cycle was begun</li> <li>- the length of the incineration cycle</li> <li>- the total quantity of medical waste incinerated, per incineration cycle</li> <li>- an estimate of the quantity of regulated medical waste incinerated, per incineration cycle.</li> </ul> <p>Verify that generators retain the operating log required until at least 36 months from the date of shipment.</p> <p>Verify that generators with on-site incinerators that accept regulated medical waste from generators subject to the tracking form requirements keep copies of all tracking forms for a period of 3 years from the date they accepted the waste.</p> <p>Verify that generators retain a copy of the on-site incinerator required report for 3 years from the date of submission.</p> <p>Verify that the owner or operator of an on-site incinerator prepares and submits a copy of the annual on-site incinerator report on forms prescribed by the Department.</p> <p>Verify that the annual report is submitted by March 31.</p> |

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| <b>SO.135.</b><br><br><b>LANDFILLS</b><br><br><b>SO.135.1.NY.</b> [Deleted January 1999].<br><br><b>SO.135.2.NY.</b> Landfills must meet specific construction requirements (6 NYCRR Sections 360-2.13 and 360-2.17(s) and (u)). | <p>(NOTE: This checklist item duplicated requirements in section SO.5.NY.)</p> <p>Verify that minimum horizontal separation between deposited solid waste in the landfill and the property line is 100 ft.</p> <p>Verify that solid waste is not deposited closer than 100 ft to the mean high water elevation of any surface waters.</p> <p>Verify that a permanent survey benchmark of known elevation, measured from a U.S. Geological Survey benchmark, is established and maintained for each 25 acres of developed landfill.</p> <p>Verify that the New York Transverse Mercator coordinates are established.</p> <p>Verify that all leachate collection pipe networks located in the primary and secondary leachate collection and removal systems are designed to allow for accessibility of equipment and to facilitate effective routine cleaning and maintenance.</p> <p>Verify that gas venting risers from the gas venting layer meet the following criteria:</p> <ul style="list-style-type: none"> <li>- are spaced at a maximum separation of one vent per acre of final cover</li> <li>- are installed at a depth of at least 5 ft into the refuse</li> <li>- are exposed at least 3 ft above final elevation of the cover system and are fitted with a gooseneck cap or other equivalent cap to allow effective venting.</li> </ul> <p>Verify that the topsoil layer, or alternative soil material, is designed and constructed to maintain vegetative growth.</p> <p>Verify that a construction certification report is submitted to the Department within 45 days after completion of landfill construction.</p> <p>Verify that the construction certification report contains the following information:</p> <ul style="list-style-type: none"> <li>- results of all construction quality assurance and construction quality control testing required</li> <li>- documentation of any failed test results</li> <li>- descriptions of procedures used to correct improperly installed material</li> </ul> |

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| <b>SO.135.3.NY.</b> Landfills must meet specific operating requirements that protect the environment (6 NYCRR Sections 360-2.17(a) and (g) through (j) and (r)). | <ul style="list-style-type: none"> <li>- results of all retesting performed</li> <li>- as-built drawings noting any deviation from approved engineering plans</li> <li>- comprehensive narrative including, but not limited to, daily reports from the project engineer and a series of color photographs of major project features.</li> </ul> <p>Verify that the landfill has and maintains a perimeter access road.</p> <p>Verify that landfills accepting more than 20 tons per day of solid waste effectively operate and maintain weight scales.</p> <p>Verify that a water quality monitoring program is implemented meeting the requirements of the hydrogeologic report and special permit conditions.</p> <p>Verify that all landfills are constructed, operated, and closed to minimize generation of leachate and to prevent migration of leachate into surface and groundwater.</p> <p>Verify that the primary leachate collection and removal system is maintained in accordance with provisions in the leachate management plan (part of the operation and maintenance manual).</p> <p>Verify that daily monitoring of the secondary leachate collection and removal system is accomplished to determine the presence, quantity, nature, and significance of any liquid detected in accordance with the leachate management plan.</p> <p>Verify that leachate recirculation is undertaken only if the following requirements are met:</p> <ul style="list-style-type: none"> <li>- an existing, permitted landfill has Department approval, all operating requirements are met, and groundwater monitoring data verifies no landfill induced contamination</li> <li>- new landfills, or existing landfills without Department approval, which have a double liner system acceptable to the Department, along with demonstration of a minimum of 6 mo of acceptable primary liner performance submitted for approval</li> <li>- all leachate recirculation proposals have an operations manual.</li> </ul> <p>Verify that leachate recirculation is not undertaken on areas where any soil cover has been applied, unless provisions for runoff collection and containment are provided.</p> <p>Verify that, in a double lined landfill, the volume of leachate to be recirculated does not increase the primary liner system leakage rate beyond the 20 gal/acre/day operational threshold based on a 30-day average and/or increase the potential for groundwater contamination.</p> <p>Verify that, when accepting a tank for disposal, tank ends are removed or cut off,</p> |

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| <p><b>SO.135.4.NY.</b> Operating landfills must meet specific safety requirements (6 NYCRR Section 360-2.17(f)).</p>  | <p>and the tank is cleaned of residue and effectively compressed to its smallest practical volume.</p> <p>Verify that concentration of methane and other explosive gases generated by the facility do not exceed either of the following:</p> <ul style="list-style-type: none"> <li>- 25 percent of the lower explosive limit (LEL) for gases in structures on- or offsite, excluding gas control or recovery system components</li> <li>- the LEL for gases at or beyond the property boundary</li> <li>- an approved ongoing gas monitoring program is initiated upon initial operation of the landfill</li> </ul> <p>Verify that upon detection of methane or other explosive gas levels exceeding LELs, the landfill operator and officials identified in the Department-approved contingency plan take the following steps:</p> <ul style="list-style-type: none"> <li>- immediately take all steps necessary to ensure safety and protection of human health</li> <li>- immediately notify the Department</li> <li>- within 7 days of detection submit to the Department methane gas levels detected and provide a description of steps taken to protect human health</li> <li>- within 45 days of detection, submit a plan and schedule to implement remediation of the gas within 60 days after detection.</li> </ul> |
| <p><b>SO.135.5.NY.</b> Landfills must follow specific waste placement requirements (6 NYCRR Section 360-2.17(b)).</p> | <p>Verify that solid waste is spread in layers not exceeding 2 ft in thickness and are compacted upon deposition at the working face by appropriately sized compaction equipment making a minimum of three passes.</p> <p>Verify that the working face is restricted to the smallest area practicable, based on peak usage traffic conditions at the landfill.</p> <p>Verify that lift height does not exceed 10 ft and does not have a final slope greater than 33 percent.</p> <p>Verify that wastes are placed and graded in accordance with the provision of the fill progression plan and are not placed at a grade of less than 4 percent to accommodate facility closure.</p> <p>Verify that the first layer of refuse placed above the leachate collection layer is a minimum of 5 ft in compacted thickness, and of a select nature containing no large rigid objects placed in a manner so as to damage the liner system.</p>  |
| <p><b>SO.135.6.NY.</b> Landfills must meet specific cover</p>   | <p>Verify that a minimum of 6 in. of compacted cover material is applied on all exposed surfaces of solid waste at the close of each operating day to control</p>  |

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| <p>requirements (6 NYCRR Sections 360-2.17(c) and (d)).</p> <p><b>SO.135.7.NY.</b> Specific types of waste are prohibited from landfills (6 NYCRR Sections 360-2.17(k) through (n), (q), (v), and (w)).</p> <p><b>SO.135.8.NY.</b> Landfills must take specific corrective measures if any of the parameters listed in the hydrogeologic report (part of the permit application) are exceeded (6 NYCRR Section 360-2.20).</p> | <p>vectors, fires, odors, blowing litter, and scavenging.</p> <p>Verify that a minimum of 12 in. of compacted cover material is applied and maintained on all landfill surfaces where no additional solid waste has been or will be deposited within 30 calendar days.</p> <p>Verify that the following wastes are not deposited in the landfill:</p> <ul style="list-style-type: none"> <li>- bulk liquids (liquid containers from households 5 gal or less in size are not considered bulk liquids)</li> <li>- industrial/commercial wastes</li> <li>- hazardous waste</li> <li>- whole tires</li> <li>- lead acid batteries.</li> </ul> <p>Verify that the following steps are taken before depositing sludge in the landfill:</p> <ul style="list-style-type: none"> <li>- sludge is stabilized</li> <li>- sludge is dewatered to 20 percent solids with no free liquid as defined by the paint filter liquids test (method 9095) in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA publication SW-846.</li> </ul> <p>Verify that landfills without leachate collection, treatment, and monitoring facilities do not accept sludge whose wet weight exceeds 25 percent of the combined total weight of the sludge and other solid waste accepted on a daily basis.</p> <p>Verify that a waste collection vehicle is selected at random at least weekly and its solid waste unloaded at the working face for inspection for unauthorized wastes.</p> <p>Verify that a record of this inspection is kept on the premises and available for Department review.</p> <p>Determine whether the landfill has exceeded any of the parameters listed in the hydrogeologic report.</p> <p>Verify that the Department is notified and a corrective measures assessment is begun within 90 days of the detection.</p> <p>Verify that the corrective measures assessment is discussed with the public at a public meeting and with the Department before selection of corrective measures.</p> <p>Verify that the public meeting is advertised in a newspaper with general circulation in the area within which the landfill is located and by a direct mailing to contiguous property owners.</p> |



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| <p><b>SO.135.9.NY.</b> Landfills must meet specific closure design and plan requirements (6 NYCRR Sections 360-2.15(a), (c), (f), and (h) through (j)).</p> | <p>Verify that the notice is published and mailed not less than 2 weeks before the meeting and indicates the date, time, place, and purpose of the meeting.</p> <p>Verify that, within 90 days after selection of a Department-approved corrective measure, the landfill completes and submits to the Department a corrective measures plan.</p> <p>Verify that, once the corrective measure plan is approved by the Department, the following steps are taken:</p> <ul style="list-style-type: none"> <li>- establish and implement an approved corrective measure groundwater monitoring program</li> <li>- implement corrective measures selected in accordance with terms, conditions, and schedule set forth in an approved corrective measures work plan</li> <li>- take any interim measures necessary to protect public health, safety, the environment, and to ensure protection of natural resources.</li> </ul> <p>Verify that the Department is notified within 14 days when the corrective measure has been completed with a certification signed by the landfill owner or operator.</p> <p>Verify that the landfill conducts a closure site investigation including the following elements:</p> <ul style="list-style-type: none"> <li>- hydrogeologic investigation</li> <li>- explosive gas investigation</li> <li>- surface leachate investigation</li> <li>- vector investigation.</li> </ul> <p>Verify that data from the investigation is compiled and presented in a report to the Department at least 180 days before last receipt of waste, including a summary of environmental conditions.</p> <p>Verify that a final closure plan is submitted to the Department within 60 days before the last receipt of waste, within 60 days before the last day of the operating permit, or in accordance with permit requirements, whichever is earlier.</p> <p>Verify that landfill closure activities are completed in accordance with the approved final closure plan within 210 days following last receipt of waste, or within a time frame deemed acceptable by the Department.</p> <p>Verify that a closure certification report is submitted to the Department within 45 days after completion of closure construction for approval and file record.</p> <p>Verify that the report contains the following information:</p> <ul style="list-style-type: none"> <li>- results of all required construction quality assurance testing</li> <li>- documentation of any failed test results</li> </ul> |

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| <p><b>SO.135.10.NY.</b> Landfills must meet specific postclosure operation and maintenance requirements (6 NYCRR Sections 360-2.15(k)(1) through (6) and (8)).</p> | <ul style="list-style-type: none"> <li>- descriptions of procedures used to correct the improperly installed material</li> <li>- statements of all retesting performed</li> <li>- as-built drawings noting any deviation from the approved final closure plans.</li> </ul> <p>Verify that the closed landfill has a perimeter gas collection system consisting of either:</p> <ul style="list-style-type: none"> <li>- trenches keyed into a low permeability soil, a bedrock layer, or the seasonally low groundwater table, which can effectively cut off the lateral migration of gas</li> <li>- gas wells screened in the unsaturated zone to the seasonally low water table or low permeability soil/bedrock layer that are spaced along the perimeter of the landfill to sufficiently prevent gas migration.</li> </ul> <p>Verify that condensate generated and collected from gas processing or control systems is not recirculated into the landfill unless the following criteria are met:</p> <ul style="list-style-type: none"> <li>- the landfill has a Department-approved liner and leachate collection and removal system</li> <li>- the landfill is operating in compliance with landfill operating requirements</li> <li>- prior written approval has been given by the Department.</li> </ul> <p>Verify that, if the preceding criteria are not met, the condensate is appropriately disposed of by other means.</p> <p>Verify that, if the site closure investigation report identified vector problems, an appropriate remediation program is implemented.</p> <p>Verify that a provision is included in the property deed with the following information:</p> <ul style="list-style-type: none"> <li>- indicates period of time during which the property was used as a landfill</li> <li>- describes the wastes contained within</li> <li>- notes that records of the facility have been filed with the Department</li> <li>- references a map filed with the county clerk which indicates the limits of the landfilled areas within the property boundary</li> <li>- indicates that the use of the site is restricted.</li> </ul> <p>Verify that drainage control structures are maintained to prevent ponding and erosion to the cover.</p> <p>Verify that soil cover integrity, slopes, cover vegetation, drainage structures, and gas venting structures are maintained.</p> <p>Verify that environmental and facility monitoring points are maintained and sampled for at least 30 yr.</p> |

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| <p><b>SO.135.11.NY.</b> Closing solid waste management facilities must have a comprehensive postclosure monitoring and maintenance operations manual (6 NYCRR Section 360-2.15(k)(7)).</p> | <p>Verify that postclosure explosive gas monitoring is performed at least quarterly.</p> <p>Verify that, if gas monitoring shows explosive gas levels in excess of LEL at the property boundary or in excess of 25 percent of the LEL within any structures, appropriate actions are taken and the Department is notified.</p> <p>Verify that annual summary reports submitted to the Department described the results of maintenance, monitoring, and/or sampling for the environmental and facility monitoring points.</p> <p>Verify that annual baseline and quarterly routine monitoring is performed on groundwater, surface water, and leachate samples for a minimum period of 5 yr.</p> <p>(NOTE: After 5 yr, the permittee may request the Department to modify the sampling and analysis requirements.)</p> <p>Verify that maintenance and operation of the leachate collection system continues during the postclosure period.</p> <p>Verify that a vegetative cover is established and maintained on all exposed final cover material within 4 mo after placement.</p> <p>Verify that quarterly inspections and inspections after major rainfall events (5-yr storms) are performed on all facility components during the minimum 30-yr postclosure period.</p> <p>Verify that results of these inspections are submitted to the Department as part of a registration renewal report.</p> <p>Verify that the facility has a postclosure monitoring and maintenance operations manual with the following information:</p> <ul style="list-style-type: none"> <li>- description of type, location, sampling, and sample preservation methodology and recordkeeping and reporting requirements for all environmental monitoring activities</li> <li>- description of all environmental control systems</li> <li>- description of types, location, and frequency of all other facility maintenance activities</li> <li>- description of resource requirements</li> <li>- name, address, and telephone number of the person or office to contact on postclosure monitoring and maintenance, and corrective measures</li> <li>- description of planned uses of the property during the postclosure period.</li> </ul> <p>Verify that the facility has a postclosure contingency plan with the following information:</p> <ul style="list-style-type: none"> <li>- response to problems that have a reasonable likelihood of occurrence</li> <li>- action levels above which identified environmental monitoring,</li> </ul> |

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| <p><b>SO.135.12.NY.</b> Closing solid waste management facilities must meet specific registration requirements (6 NYCRR Section 360-2.15(l)).</p> <p><b>SO.135.13.NY.</b> Landfills must meet specific recordkeeping requirements (6 NYCRR Section 360-2.17(t)).</p> <p><b>SO.135.14.NY.</b> Landfills must have an operating manual (6 NYCRR Section 360-2.9).</p> | <p>environmental control, or maintenance problems require prompt action and notification to the Department</p> <ul style="list-style-type: none"> <li>- summary of any necessary corrective measures.</li> </ul> <p>Verify that the closing facility registers with the Department at least 1 yr before scheduled to cease accepting waste.</p> <p>Verify that the registration is renewed every 5 yr until the Department determines that the postclosure monitoring and maintenance period for the facility has ended.</p> <p>Verify that all active landfills submit to both the central office and appropriate regional office of the Department an annual report with the following information no later than 60 days after 1 January of each year of operation:</p> <ul style="list-style-type: none"> <li>- total quantity in tons of solid waste disposed of from 1 January to 31 December by waste type and in both tons per day and total tons per quarter</li> <li>- remaining site life and capacity in yd<sup>3</sup> of the existing constructed landfill and remaining capacity and site life of those other areas not yet built, but which have received entitlement under a permit</li> <li>- estimate of actual in situ waste density made, considering accumulative volume of landfill airspace used and amount of waste disposed</li> <li>- compilation of all water and leachate quality data collected throughout the year</li> <li>- for all landfills collecting leachate onsite, total amounts of leachate collected and amount transported offsite or treated on a monthly basis; for leachate treated offsite, the treatment facility used</li> <li>- for landfills with double liners using secondary leachate collection and removal systems, amount of leachate collected in secondary leachate collection and removal system compiled on a monthly basis and reported annually to the Department</li> <li>- any changes from the approved report, plans, and specifications or permit conditions</li> <li>- amount (tons per year) of each solid waste type (recyclables) recovered from disposal, and its final destination.</li> </ul> <p>Verify that each landfill has an operation and maintenance manual that contains a comprehensive description that reflects the day-to-day facility operations throughout the active life of the facility.</p> <p>Verify that the narrative description is sufficiently detailed to explain all pertinent methods of operations and related procedures, and includes samples of all reporting forms, logs, plans, and descriptions of the following:</p> <ul style="list-style-type: none"> <li>- the landfill's overall operation, stipulating how this facility will be operated</li> </ul> |

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|   | <p>in an environmentally sound and resource conscious manner</p> <ul style="list-style-type: none"> <li>- the project's personnel requirements, including discussions for implementation of a training program for facility operators and other key personnel</li> <li>- all the machinery and equipment, including health and safety and gas monitoring equipment, to be used at the landfill, their intended uses, safety features and availability of standby equipment in the event of breakdowns, maintenance, or loss of power</li> <li>- operational controls, including, but not limited to signs, hours and days of operation, usage rules and regulations, and traffic controls</li> <li>- the landfill's fill progression</li> <li>- the anticipated amount of all solid waste to be received per day</li> <li>- the landfill's solid waste receiving and monitoring process</li> <li>- the types and functions of daily, intermediate, and final cover</li> <li>- the landfill's leachate management plan</li> <li>- the project's gas monitoring program</li> <li>- how winter and inclement weather operations will be conducted</li> <li>- if applicable, a description of the operation of a convenience station at the landfill for smaller, private vehicles to unload refuse at an area other than the landfill's working face</li> <li>- the procedures and precautions to be taken during the placement of the first lift of waste above the liner and leachate collection system</li> <li>- the landfill fire prevention plan; the plan identifies all appropriate emergency telephone numbers, which are clearly posted near or on each landfill telephone.</li> </ul> |
| <b>SO.135.15.NY.</b> Landfills must maintain a daily log of solid wastes received (6 NYCRR Section 360-2.9(e)). | <p>Verify that the landfill maintains a daily log of solid wastes received at the landfill which includes the following information; waste type, quantity, origin, and/or hauler and date received.</p>   |
| <b>SO.135.16.NY.</b> Landfills must prepare and maintain a contingency plan (6 NYCRR Section 360-2.10).         | <p>Verify that the landfill has a contingency plan which discusses technically and financially feasible courses of action to be taken in responding to emergencies or other special conditions, and includes the following:</p> <ul style="list-style-type: none"> <li>- construction related contingency plan</li> <li>- operation related contingency plan, covering routine operations and exceedances of allowable primary liner system leakage</li> <li>- postclosure contingency plan.</li> </ul>   |
| <b>SO.135.17.NY.</b> Certain landfills located in Nassau and Suffolk Counties are prohibited (6 NYCRR           | <p>(NOTE: This section applies to landfills located in Nassau and Suffolk Counties, including construction and demolition (C&amp;D) landfills.)</p> <p>Verify that existing landfills located outside the deep recharge areas are not used</p>  |

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| <p>Sections 360-8.4 and 360-8.5)<br/>[Revised January 1998].</p> <p><b>SO.135.18.NY.</b> New clean fill landfills located in Nassau and Suffolk Counties outside the deep flow recharge area and expansion and existing landfills must meet certain design and location requirements (6 NYCRR Sections 360-8.3(a), (c), and (e)) [Revised January 1998].</p> <p><b>SO.135.19.NY.</b> New clean fill landfills located in Nassau and Suffolk Counties outside the deep flow recharge area and expansion and existing landfills must meet certain operating requirements (6 NYCRR Section 360-8.3(d)) [Revised January 1998].</p> | <p>unless the requirements under this section (LANDFILLS-Long Island Landfills) are met and the Department has approved its use in writing.</p> <p>Verify that no new landfills are constructed or operated in the deep flow recharge area, except for the disposal of clean fill.</p> <p>(NOTE: This section applies to landfills located in Nassau and Suffolk Counties, including construction and demolition (C&amp;D) landfills.)</p> <p>Verify that these landfills are not located in a regulated wetland or on a flood plain.</p> <p>Verify that the landfill is designed and operated to minimize the migration of methane gas or other gases beyond the boundaries of the landfill, including the following:</p> <ul style="list-style-type: none"> <li>- appropriate means to vent decomposition gases</li> <li>- a gas monitoring program with gas monitoring probes placed at various depths.</li> </ul> <p>Verify that, if the landfill has a history of gas migration, an active perimeter gas control system is constructed and operated.</p> <p>Verify that any landfill existing as of 5 August 1993 and used for continued operation has both of the following components, approved by the Department:</p> <ul style="list-style-type: none"> <li>- underlain by at least two natural and/or synthetic liners, each with provisions for leachate collection</li> <li>- has a treatment and disposal system.</li> </ul> <p>Verify that the landfill (except an expansion inside the deep recharge area) accepts only solid waste that is the product of resource recovery, incineration, or composting and downtime waste, and untreatable waste.</p> <p>Verify that downtime waste and untreatable waste are only deposited in a special disposal area located and constructed so as to physically segregate these wastes and minimize their effects on residents of the surrounding area.</p> <p>Verify that not more than 10 percent of the annual rated capacity of a resource recovery facility is disposed of as downtime waste per year.</p> <p>(NOTE: If located outside the deep flow recharge area, an existing landfill, expansion, or new landfill may also accept solid waste if approved by the Commissioner.)</p> |

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| <p><b>SO.140.</b></p> <p><b>INERT WASTE<br/>LANDFILLS</b></p> <p><b>SO.140.1.NY.</b> Construction and demolition (C&amp;D) debris landfills must be permitted by the state (6 NYCRR Section 360-7.1) [Revised March 2004].</p> <p><b>SO.140.2.NY.</b> C&amp;D debris landfills must be operated according to specific standards (6 NYCRR Sections 360-7.5) [Citation Revised March 2004].</p> | <p>(NOTE: This checklist item does not apply to landfills located in Nassau or Suffolk County.)</p> <p>Verify that C&amp;D debris landfills are permitted by the Department.</p> <p>(NOTE: The following facilities are exempt from the permit requirements provided the facilities operate only between the hours of sunrise and sunset, and (if the allowable waste comes from an offsite source) no fee or other form of consideration is required for the privilege of using the facility for disposal purposes:</p> <ul style="list-style-type: none"> <li>- a site at which only the following C&amp;D debris is placed: recognizable uncontaminated concrete and concrete products (including steel or fiberglass reinforcing rods that are embedded in the concrete), asphalt pavement, brick, glass, soil and rock</li> <li>- a landfill for the disposal of trees, stumps, yard waste, and wood chips generated from these materials is exempt when origin and disposal of such waste occur on properties under the same ownership or control</li> <li>- a C&amp;D debris landfill constructed and operated pursuant to a permit issued by the Adirondack Park Agency</li> <li>- a landfill that meets the specifications contained in a memorandum of understanding executed by the New York State Thruway Authority and the Department or the New York State Department of Transportation and the Department.)</li> </ul> <p>Verify that all C&amp;D debris landfills have a water quality monitoring program.</p> <p>Verify that each landfill prepares an annual report containing the following information about the previous calendar year's operation:</p> <ul style="list-style-type: none"> <li>- the total quantity of waste received in cubic yards and tons, and the percentage of the remaining approved design volume left</li> <li>- a tabulation of any water quality analysis</li> <li>- any deviations from the approved plans, specifications, operating requirements and permit conditions</li> <li>- the amount of leachate collected, if any, and how it was handled, treated, and disposed of</li> <li>- annual adjustments to closure and postclosure care cost estimates and financial assurance documents, and applicable corrective measures cost estimates and financial assurance documents.</li> </ul> <p>Verify that C&amp;D debris is spread in layers not exceeding 5 ft in uncompacted</p> |



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| <p><b>SO.140.3.NY.</b> C&amp;D debris landfills without an approved final closure plan must meet</p> | <p>thickness.</p> <p>Verify that the first layer of waste placed in contact with any leachate management structures is at least 5 ft in compacted thickness, of a select nature, and placed in a manner that will not impact or impede the operation of these structures.</p> <p>Verify that no slope is greater than 33 percent.</p> <p>Verify that the application of cover material is in accordance with the Department-approved operation and maintenance manual to control odors, fire hazards, vectors, blowing litter, and scavenging.</p> <p>Verify that the final cover system is applied and maintained during any of the following circumstances:</p> <ul style="list-style-type: none"> <li>- whenever an additional lift of C&amp;D debris is not applied within a 1-yr period</li> <li>- when 3 acres of the landfill attains final elevation, within 90 days after such elevation is attained</li> <li>- to an entire landfill for which an application for a permit has been denied or for which a permit has expired or is revoked</li> <li>- for sites greater than 3 acres in size, a progressive final cover installation schedule is designed and implemented.</li> </ul> <p>Verify that vegetative cover is established on all exposed final cover material as soon as possible, but not later than 4 mo after placement.</p> <p>Verify that landfills are constructed and operated to minimize the generation of leachate.</p> <p>Verify that disposal in a C&amp;D debris landfill of any material not specifically allowed in the definition of C&amp;D debris or which is further restricted by permit conditions is prohibited.</p> <p>Verify that an attendant is on duty during all operating hours of the landfill, and the landfill is operated only between the hours of sunrise and sunset.</p> <p>Verify that the landfill operator has in his possession during all hours of operation, a copy of the permit, including conditions, a copy of the operation and maintenance manual, and the most recent annual report.</p> <p>(NOTE: All permitted C&amp;D landfills must conform to the operation requirements in this section, except that landfills 3 acres or less in size are exempt from the requirements for reporting leachate collected and annual adjustments to closure and postclosure care costs and financial assurance documents.)</p> <p>Verify that, if the C&amp;D landfill does not have an approved final closure plan, closure takes place in accordance with Department requirements and a remedial</p> |

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| <p>specific closure requirements (6 NYCRR Sections 360-7.6(a) through (c)) [Revised January 1999; Revised March 2004].</p> <p><b>SO.140.4.NY.</b> C&amp;D debris landfills must have postclosure maintenance (6 NYCRR Sections 360-7.6(d) and (e)) [Revised March 2004].</p> | <p>investigation is undertaken to ensure adequate closure that includes:</p> <ul style="list-style-type: none"> <li>- hydrogeologic investigation</li> <li>- explosive gas investigation</li> <li>- surface leachate investigation</li> <li>- vector investigation.</li> </ul> <p>(NOTE: C&amp;D landfills with a slope of more than 33 percent that do not have an approved final closure plan must include a slope stability analysis.)</p> <p>Verify that soil cover integrity, slopes, cover vegetation, and drainage structures are maintained.</p> <p>Verify that environmental and facility monitoring points are maintained and sampled for at least 30 yr.</p> <p>Verify that annual summary reports are submitted to the department.</p> <p>Verify that annual baseline and quarterly routine monitoring are performed on groundwater, surface water and leachate samples for a minimum period of five years.</p> <p>(NOTE: The requirements for subsequent analysis will be determined at the end of each five-year period.)</p> <p>Verify that maintenance and operation of the leachate collection system continues during the postclosure period.</p> <p>Verify that the installation has developed a comprehensive postclosure monitoring and maintenance manual.</p> |

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| <b>SO.145.</b><br><br><b>INCINERATORS</b><br><br><b>SO.145.1.NY.</b> [Deleted January 1999].<br><br><b>SO.145.2.NY.</b> Solid waste incinerators, refuse-derived fuel processing facilities, and solid waste pyrolysis units must meet specific operating requirements (6 NYCRR Sections 360-3.4(a), (b), and (d)). | <p>(NOTE: This checklist item duplicated requirements in section SO.5.NY.)</p> <p>(NOTE: Solid waste incinerators existing on 31 December 1988 with a total design capacity of less than 2000 lb/h are exempt from these requirements.)</p> <p>Verify that all activities at these facilities are performed in accordance with a Department-approved operation and maintenance manual.</p> <p>Verify that the manual is updated no less frequently than the duration of the permit.</p> <p>Verify that the manual and all plans and programs required are maintained and available for reference and inspection at the facility.</p> <p>Verify that the facility does not knowingly accept types of solid waste not authorized by the Department.</p> <p>Verify that all unauthorized waste is weighed and recorded and results incorporated into the quarterly report.</p> <p>Verify that all solid waste delivered to the facility is processed and contained within a completely enclosed area to minimize the effects of weather, wind, and precipitation.</p> <p>Verify that the solid waste stored onsite does not exceed seven times the approved daily design capacity.</p> <p>Verify that putrescible solid waste is not stored externally.</p> <p>Verify that nonputrescible recyclables or oversized, bulky, or nonprocessable solid wastes are stored only outside the facility for up to 1 week.</p> <p>Verify that all rejected, oversized, bulky, nonprocessable, and bypass waste that is not recyclable is disposed of at a Department-approved facility if located within the State, or an authorized facility if located out-of-state.</p> <p>Verify that the Department is notified of all process changes before they are implemented.</p> |

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| <b>SO.145.3.NY.</b> Solid waste incinerators, refuse-derived fuel processing facilities, and solid waste pyrolysis units must meet specific design and access requirements (6 NYCRR Sections 360-3.4(c) and (e)). | <p>(NOTE: Solid waste incinerators existing on 31 December 1988 with a total design capacity of less than 2000 lb/h are exempt from these requirements.)</p> <p>Verify that the site and facility has adequate drainage and is free of standing water.</p> <p>Verify that unauthorized entry onto the facility is restricted and minimized.</p> <p>Verify that signs, legible from a distance of at least 25 ft and reading VISITORS AND UNAUTHORIZED PERSONNEL MUST REPORT TO THE OFFICE, are posted at each entrance and other locations in sufficient numbers to be seen from any approach.</p>   |
| <b>SO.145.4.NY.</b> Solid waste incinerators, refuse-derived fuel processing facilities, and solid waste pyrolysis units must meet specific recordkeeping requirements (6 NYCRR Section 360-3.4(f)).              | <p>(NOTE: Solid waste incinerators existing on 31 December 1988 with a total design capacity of less than 2000 lb/h are exempt from these requirements.)</p> <p>Verify that the Department's solid waste engineer in the departmental region in which the facility is located is immediately notified if an unscheduled total facility shutdown exceeds 24 h.</p> <p>Verify that a written confirmation letter describing the incident that resulted in the unscheduled shutdown and an assessment of any impacts are sent to the regional solid waste engineer within 15 days of the incident.</p> <p>Verify that a quarterly report is prepared and filed, compiled for each month, with a copy sent to the Department's central office and the office of the Department administering the region within 60 days after the end of each quarter.</p> <p>Verify that an annual report is prepared and filed with the Department's central office and the departmental region within 60 days after the last day of the calendar year.</p> |
| <b>SO.145.5.NY.</b> Ash residues must be managed according to specific requirements (6 NYCRR Section 360-3.5).  | <p>(NOTE: Solid waste incinerators existing on 31 December 1988 with a total design capacity of less than 2000 lb/h are exempt from these requirements.)</p> <p>(NOTE: These requirements apply to ash residues generated by the incineration of household waste only, without energy recovery. Ash residues generated by solid waste incinerators providing energy recovery from mass burning of solid waste and burning of refuse-derived fuel are covered by these requirements, provided that:</p> <ul style="list-style-type: none"> <li>- the facility receives and combusts only household waste, solid waste from commercial and industrial sources that does not contain hazardous waste, and other nonhazardous solid waste (including medical waste)</li> <li>- does not accept hazardous waste.)</li> </ul>  |

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| <p><b>SO.145.6.NY.</b> Solid waste incinerators, refuse-derived fuel processing facilities, and solid waste pyrolysis units must meet specific health and safety requirements (6 NYCRR Sections 360-3.4(g)(1) through (3)).</p> | <p>Verify that the facility has an ash residue management plan which describes the methods, equipment, and structures needed to prevent the uncontrolled dispersion of ash residue.</p> <p>Verify that the ash residue management plan specifies the landfill or landfills that will receive the ash residue from the facility.</p> <p>Verify that the facility tests ash residues as follows:</p> <ul style="list-style-type: none"> <li>- bottom ash and fly ash are tested separately, unless combined</li> <li>- a representative sample of ash is tested for volatile matter on a weekly basis (or as specified by the Department)</li> <li>- ash residues are tested for leaching potential and for compositional analysis within 1 mo of commencement of operations and semiannually thereafter.</li> </ul> <p>(NOTE: Solid waste incinerators existing on 31 December 1988 with a total design capacity of less than 2000 lb/h are exempt from these requirements.)</p> <p>Verify that all facilities are equipped with the following:</p> <ul style="list-style-type: none"> <li>- internal communications system capable of providing immediate emergency instruction to facility personnel, and an alarm system to notify facility personnel of an emergency condition</li> <li>- device, such as a telephone (immediately available at the scene of operations) or a hand-held, two-way radio, capable of summoning emergency assistance from local police departments, fire departments, and state or local emergency response teams</li> <li>- portable fire extinguishers, fire control equipment (including special extinguishing equipment), and spill control equipment</li> <li>- water available at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems.</li> </ul> <p>Verify that all emergency equipment is tested and maintained as necessary to assure its proper operation.</p> <p>Verify that all personnel involved in the operation are provided with immediate access to an internal alarm or emergency communication device.</p> |
| <p><b>SO.145.7.NY.</b> Solid waste incinerators, refuse-derived fuel processing facilities, and solid waste pyrolysis units must have an emergency coordinator (6 NYCRR</p>   | <p>(NOTE: Solid waste incinerators existing on 31 December 1988 with a total design capacity of less than 2000 lb/h are exempt from these requirements.)</p> <p>Verify that at least one employee is available at all times during facility operation with the responsibility for coordinating all emergency response measures.</p> <p>Verify that the coordinator is thoroughly familiar with all aspects of the</p>  |

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| Section 360-3.4(g)(4)).  | <p>contingency plan, all operations and activities, location and characteristics of the solid waste, location of all records, and facility layout.</p> <p>Verify that the coordinator takes the following actions:</p> <ul style="list-style-type: none"> <li>- whenever there is an emergency situation, ensures that internal facility alarms or communication systems are activated to notify all personnel and, if needed, all appropriate state or local agencies with designated response roles</li> <li>- if the coordinator determines the facility has had a fire or explosion which could threaten human health or the environment, reports to the appropriate officials outlined in the contingency plan</li> <li>- during an emergency, takes all reasonable measures to ensure fires and explosions do not occur, recur, or spread</li> <li>- if operations cease in response to fire or explosion, monitors for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment</li> <li>- immediately after an emergency, provides or arranges for treatment, storage, or disposal of solid wastes, contaminated soil or water, and any other material</li> <li>- ensures cleanup procedures are completed and emergency equipment, listed in the contingency plan, is cleaned and prepared for its intended use</li> <li>- notifies the Department and appropriate State and local officials when ready to resume operations</li> <li>- notes in the operating record and quarterly report the time, date, and details of any incident requiring implementation of the contingency plan and submits a written report to the Department's central office and the office of the Department administering the region within 15 days of the incident.</li> </ul> <p>Verify that a report of an incident requiring implementation of the contingency plan contains the following information:</p> <ul style="list-style-type: none"> <li>- name, address, and telephone number of the operator and facility</li> <li>- date, time, and type of incident</li> <li>- type and quantity of materials involved</li> <li>- extent of injuries, if any</li> <li>- assessment of actual or potential hazards to human health or the environment, where applicable</li> <li>- estimated quantity and disposition of solid waste, liquids, or material recovered that resulted from the incident</li> <li>- procedures or equipment available to prevent a recurrence.</li> </ul> |

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| <b>SO.155.</b><br><br><b>SURFACE<br/>IMPOUNDMENTS</b><br><br><b>SO.155.1.NY.</b> [Deleted January 1999].<br><br><b>SO.155.2.NY.</b> Surface impoundments must be designed and constructed according to specific requirements (6 NYCRR Section 360-6.5).<br><br><b>SO.155.3.NY.</b> Surface impoundments must meet specific closure requirements (6 NYCRR Section 360-6.6 and 360-4.10(o)) [Citation Revised March 2004]. | <p>(NOTE: This checklist item duplicates requirements in SO.5.NY.)</p> <p>Verify that any surface impoundment is constructed a minimum of 5 ft above the seasonally high groundwater table, and a minimum of 5 ft of vertical separation is maintained between the base of the constructed liner and bedrock.</p> <p>Verify that surface impoundments are constructed with a liner system consisting of a minimum of two liners and a leak-detection system as follows:</p> <ul style="list-style-type: none"> <li>- top liner is a geosynthetic liner with a minimum thickness equal to 60 mil</li> <li>- ballast material, such as rounded gravel or sand, that will not cause damage to the liner is placed on top of the liner to preserve liner integrity</li> <li>- a leak detection and removal system is installed between the two synthetic liners</li> <li>- the lower composite liner consists of a minimum of 2 ft of compacted soil with a maximum coefficient of permeability of <math>1 \times 10^{-7}</math> cm/s overlain by a geosynthetic liner at least 60 mil thick</li> <li>- quality assurance and quality control testing is performed by the project engineer.</li> </ul> <p>Verify that a minimum of 2 ft of freeboard is maintained in all surface impoundments.</p> <p>Verify that odor and vector control is practiced when necessary.</p> <p>Verify that a minimum of three groundwater monitoring wells, one upgradient and two downgradient of the impoundment, are installed and sampled in accordance with the geohydrologic report (part of the permit application).</p> <p>Verify that closure activities are completed in accordance with the approved closure plan (part of permit application) within 180 days after liquid collection has ceased.</p> <p>Verify that, at closure, all solid waste is removed from the impoundment, connecting lines, and any associated secondary containment systems.</p> <p>Verify that all solid waste removed is properly handled and disposed.</p> |

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|   | <p>Verify that all connecting lines are disconnected and securely capped or plugged.</p> <p>Verify that all waste residues, contaminated system components, contaminated subsoils, and structures and equipment contaminated with waste are removed and appropriately disposed of.</p> <p>Verify that the impoundment is backfilled and regraded to the surrounding topography.</p> <p>(NOTE: If groundwater surrounding the impoundment is not contaminated, the liner system may remain in place if drained, cleaned to remove all traces of waste, and both liners punctured so that drainage is allowed. Corrective actions may be required if the groundwater is contaminated.)</p>  |
| <p><b>SO.155.4.NY.</b> Surface impoundments must meet operational requirements (6 NYCRR Section 360-4.10(a) through (d), and (k)) [Added March 2004].</p>                         | <p>Verify a certification of construction is obtained for a surface impoundment, prior to use as a storage facility.</p> <p>Verify that the separation to a nearby residence, place of business, or public contact area is at least 1,500 feet.</p> <p>Verify that vector control is practiced when necessary.</p> <p>Verify that access to surface impoundments is strictly and continuously controlled by fencing, gates, and signs.</p> <p>Verify that water quality is established before placement of any biosolids, septage, or other solid waste in a surface impoundment.</p>   |
| <p><b>SO.155.5.NY.</b> Surface impoundments must meet monitoring, recordkeeping and reporting requirements (6 NYCRR Section 360-4.10(e), (n) through (p)) [Added March 2004].</p> | <p>Verify that all samples obtained from the storage facility are representative of the material stored.</p> <p>Verify that quarterly sampling of the wells at a surface impoundment site is conducted for the following parameters: chloride, nitrate, ammonia, sulfate, specific conductivity, total hardness, alkalinity, total organic carbon and chemical oxygen demand.</p> <p>In addition, for facilities that store biosolids, annual sampling is required for the following parameters: arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, boron, barium, beryllium, cyanide, turbidity and volatile organic compounds.</p> <p>Verify that all analyses are performed by a laboratory certified by the New York State Department of Health.</p> <p>Verify that chain of custody procedures for samples are documented.</p> |



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|  | <p>Verify that sampling results reported to the department include the laboratory results, sampling methods, sampling personnel, dates and times samples were taken, purge volumes, field parameters and other relevant information.</p> <p>Verify that the department is notified at least five days before each sampling event.</p> <p>Verify that all monitoring well results are submitted to the department within 60 days after each sampling event.</p> <p>Verify that an annual report is submitted to the department's central office and appropriate regional office no later than March 1 of each year covering the previous calendar year, on forms prescribed by or acceptable to the department.</p> <p>Verify that the report includes:</p> <ul style="list-style-type: none"> <li>- all required analyses</li> <li>- source and quantities of waste and delivery dates</li> <li>- quantities of waste removed and dates removed</li> <li>- results of annual inspections</li> <li>- descriptions of any operating problems and corrective actions taken.</li> </ul> |

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| <p><b>SO.160.</b></p> <p><b>WASTE TIRE MANAGEMENT</b></p> <p><b>SO.160.1.NY.</b> A permit is required for storage of 1000 or more tires (6 NYCRR Sections 360-13.1(b) and (d)) [Revised January 1999].</p> | <p>Verify that facilities storing 1000 or more waste tires have received a permit from the Department.</p> <p>(NOTE: If waste tires are collected or stored onsite in trailers, the facility may be exempt from the requirements of this Subpart even if the facility stores 1000 or more tires.)</p> <p>(NOTE: The following installations storing 1000 or more waste tires may be eligible for registration rather than permitting:</p> <ul style="list-style-type: none"> <li>- waste tire retreaders</li> <li>- storage of waste tires for onsite energy recovery</li> <li>- tire dealers selling waste tires</li> <li>- those using waste tires in the manufacture of a new product, as approved in advance in writing by the Department, which may include asphalt and roadbed manufacturing.)</li> </ul> |

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| <p><b>SO.165.</b></p> <p><b>YARD WASTE/<br/>COMPOSTING UNITS</b></p> <p><b>SO.165.1.NY.</b> Composting facilities must be permitted or meet applicable requirements (6 NYCRR 360-5.1 and 360-5.3) [Revised January 1998; Revised March 2004].</p> <p><b>SO.165.2.NY.</b> Registered composting facilities must be meet operation requirements (6 NYCRR 360-5.1 and 360-5.3) [Revised January 1998; Revised March 2004].</p> | <p>(NOTE: This section regulates the construction and operation of composting and other organic waste processing (OWP) facilities for mixed solid waste, source separated organic waste, biosolids, septage, yard waste and other solid waste.)</p> <p>Verify that a facility composting sewage sludge, septage, yard waste, or other solid waste has a valid permit from the Department and operates within its permit conditions.</p> <p>(NOTE: The following facilities are exempt provided the facility is operated in a manner that does not produce dust or odors that unreasonably impact on neighbors of the facility and no material accepted at the facility remains on-site unprocessed for more than 36 months:</p> <ul style="list-style-type: none"> <li>- a composting facility that accepts animal manure and associated bedding material</li> <li>- a composting facility that accepts no more than 3,000 cubic yards of yard waste per year, not including brush or other wood materials not intended for composting</li> <li>- a composting facility that accepts a combination of wastes that would be exempt if operating individually for each type of waste</li> </ul> <p>(NOTE: Some facilities may be eligible for registration with the Department rather than having to obtain permits. The requirements for registered facilities are addressed in SO.165.2.NY.)</p> <p>(NOTE: The following solid waste management facilities are eligible for the registration:</p> <ul style="list-style-type: none"> <li>- a composting facility that accepts more than 3,000 cubic yards but not more than 10,000 cubic yards of yard waste per year not including the brush and other wood materials not intended for composting</li> <li>- a composting facility that accepts no more than 1,000 cubic yards of source-separated organic waste per year</li> <li>- a composting facility for food processing waste</li> </ul> <p>Verify that a registered facility is constructed and operated in compliance with the following conditions.</p> <ul style="list-style-type: none"> <li>- material accepted does not remain on-site for more than 36 months</li> <li>- the process uses acceptable amendments or bulking agents and follows an acceptable method of composting that minimizes odor generation and results in a mature product</li> <li>- the facility is constructed to minimize any ponding on the composting area</li> <li>- the facility is at least 200 feet from the nearest surface water body, potable</li> </ul> |

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|  | <p>water well, and residence or place of business, excluding the generating business and any residence or place of business built after the facility began operation</p> <p>(NOTE: In addition to the above requirements, a registered composting facility must also comply with the general requirements of a registered facility (see SO.8.9.NY through SO.8.16.NY.)</p>  |
| <p><b>SO.165.3.NY.</b> Organic waste processing (OWP) facilities for biosolids, mixed solid waste, septage and other solids must meet pathogen and vector attraction reduction requirements (6 NYCRR 360-5.5(b)) [Revised March 2004].</p>               | <p>(NOTE: The following requirements apply to mixed solid waste and solid waste that contains any amount of human waste.)</p> <p>Verify that one of the alternatives for pathogen and vector attraction reduction listed in Appendix 9-5 is followed.</p>   |
| <p><b>SO.165.4.NY.</b> Organic waste processing (OWP) facilities for biosolids, mixed solid waste, septage and other solids must meet pollutant limits and product use restrictions (6 NYCRR 360-5.5(c)) [Revised January 1998; Revised March 2004].</p> | <p>Verify that a product that does not meet the criteria in this section is disposed.</p> <p>Verify that, each waste source does not exceed the pollutant concentrations found in Appendix 9-6, unless the following conditions are met:</p> <ul style="list-style-type: none"> <li>- the waste source is a minor (less than 10 percent of the total dry weight of sludges accepted) component of the input to the facility</li> <li>- a program is developed to identify and reduce the pollutant(s) that exceed the limits for that waste source.</li> </ul> <p>(NOTE: This requirement does not apply if the product is used outside New York State. Wastewater and partially treated biosolids that are generated at one wastewater treatment facility and are further treated at another wastewater treatment facility prior to beneficial use are not considered waste sources. The resultant biosolids or sludge generated for beneficial use is subject to this paragraph).</p> <p>Verify that the product does not contain pollutant levels greater than the values found in Appendix 9-7.</p> <p>Verify that sawdust, soil, or other materials are not added to the process or product for dilution purposes.</p> <p>Verify that any material added to the process does not contain pollutants in concentrations that exceed the levels found in Appendix 9-6.</p> <p>Verify that kiln dust from a kiln that accepts hazardous waste is not accepted.</p> |

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| <p><b>SO.165.5.NY.</b> Organic waste processing (OWP) facilities for biosolids, mixed solid waste, septage and other solids must meet monitoring record keeping and reporting requirements (6 NYCRR 360-5.5(e)) [Revised January 1998; Revised March 2005].</p> | <p>Verify that the product does not contain more than 2 percent total gross contaminants by weight (dry weight basis).</p> <p>Verify that the particle size of the product does not exceed 10 millimeters (0.39 inch) particle size, except for wood particles derived from the use of wood chips as a bulking agent or amendment in composting.</p> <p>Verify that a compost product is produced from a composting process with a minimum detention time (including active composting and curing) of 50 days, unless an alternate means for achieving sufficient maturity is approved by the department.</p> <p>Verify that the product is mature and is used in a legitimate manner as a soil amendment.</p> <p>Verify that an information label is affixed to the product bag or, for bulk distribution, an information sheet or brochure is provided to the user.</p> <p>Verify that the product is distributed for use on all crops except food crops.</p> <p>(NOTE: This restriction no longer applies 38 months or later after the pathogen reduction criteria have been met. If the product is stored for 38 months or longer, it can be distributed for use on food crops. If the product has been applied to the soil, food crops could be grown on the soil 38 months or more after product application.)</p> <p>Verify that, if the product will be marketed as a fertilizer or agricultural liming material in New York State, a license is obtained from the New York State Department of Agriculture and Markets, if required.</p> <p>Verify that each biosolids source or septage is analyzed annually in accordance with the following:</p> <ul style="list-style-type: none"> <li>- the parameters for analysis listed in Appendix 9-8</li> <li>- the minimum number of analyses required depends on the quantity of waste, as outlined Appendix 9-14</li> <li>- all results are reported on a dry-weight basis, except pH and total solids</li> </ul> <p>(NOTE: Wastewater and partially treated biosolids or septage that are generated at one facility and treated at another wastewater treatment facility prior to beneficial use is not considered waste sources subject to the criteria in this subparagraph. The resultant biosolids or sludge generated for beneficial use is subject to this subparagraph.)</p> <p>Verify that annual product quality monitoring is completed as follows:</p> <ul style="list-style-type: none"> <li>- the parameters for analysis are listed in Appendix 9-9</li> <li>- the minimum number of analyses required annually as listed in Appendix 9-</li> </ul> |

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|  | <p>10</p> <ul style="list-style-type: none"> <li>- with the exception of pH and total solids, all results are reported on a dry weight basis</li> </ul> <p>Verify that sufficient monitoring data is obtained to demonstrate compliance with the pathogen and vector attraction reduction requirements in Appendix 9-5.</p> <p>Verify that daily operational records are maintained for the facility.</p> <p>Verify that the following information is retained:</p> <ul style="list-style-type: none"> <li>- a copy of the complete and final permit application.</li> <li>- records of pollutant concentration including: <ul style="list-style-type: none"> <li>- date of sample collection, sampling location, sample type, and name of sampler</li> <li>- name of laboratory, analytical methods used, and quality assurance/quality control procedures</li> <li>- analytical results.</li> </ul> </li> <li>- if required, records of pathogen and vector attraction reduction method used, including a description of how compliance was achieved, certification that the requirements were achieved, and applicable monitoring and analytical data.</li> </ul> <p>Verify that the permittee submits an annual report to the department's central office and the appropriate regional office no later than March 1 of each year covering the previous calendar year, on forms prescribed by or acceptable to the department.</p> <p>Verify that the report includes:</p> <ul style="list-style-type: none"> <li>- all information and analyses</li> <li>- the type and quantity of the waste, and other materials such as bulking agents, being processed, including the source of the material</li> <li>- process operational information including monitoring data and significant facility operational problems and any actions taken to correct such problems</li> <li>- for facilities that accept biosolids, a certification statement, signed by an authorized representative of the facility</li> <li>- the quantity, by weight and volume, of product generated at the facility and the quantity of product and other solid waste, including unacceptable product, removed from the facility</li> <li>- a description of the end-product distribution and disposal methods.</li> </ul> |
| <b>SO.165.6.NY.</b> Organic waste processing (OWP) facilities for biosolids, mixed solid waste, septage and other solids must meet operational requirements (6 NYCRR | <p>Verify that the OWP facility is not operated until a certification that construction is completed.</p> <p>In addition to the operational requirements identified for solid waste main section 360-1.14 of this Part, the following requirements apply:</p>  |

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| 360-5.5(d)) [Revised March 2004].  | <p>Verify that on-site storage of a product is limited to 24 months, unless approved by the Department on a case-specific basis.</p> <p>(NOTE: For heat drying facilities, the maximum storage time may be restricted to a shorter period due to combustion concerns, as determined by the department.)</p> <p>Verify that surface water drainage is diverted away from the operating area of the facility.</p> <p>Verify that, if a surface impoundment is used for leachate storage, a minimum of two feet of freeboard is maintained.</p> <p>Verify that all leachate is collected and disposed in a manner approved by the department.</p> <p>Verify that all leachate storage facilities are completely emptied, cleaned, and inspected every 12 months.</p> <p>Verify that the facility is operated to control the generation and migration of odors and dust.</p> <p>Verify that the facility is not operated or constructed on flood plains unless provisions have been made to prevent the encroachment of flood waters upon the facility.</p> <p>Verify that, for uncovered processing facilities, the leachate collection and treatment system are adequate to manage the quantity of leachate generated at the site based on a rainfall intensity of one-hour duration and a 10-year return period.</p> <p>Verify that noncompostable or nonprocessable solid waste and unacceptable product is disposed at least weekly.</p> <p>Verify that, for facilities accepting mixed solid waste:</p> <ul style="list-style-type: none"> <li>- a recyclables separation program and a household hazardous waste collection program are in place and approved by the department before operation of the facility</li> <li>- recyclables are removed from the waste stream prior to active composting or treatment</li> <li>- all waste storage and processing areas are enclosed.</li> </ul> <p>Verify that all waste unloading, waste storage, and processing areas are enclosed for facilities that accept an average of 100 wet tons of waste per day or greater, unless other measures are approved by the department.</p> <p>Verify that the facility does not accept wastes that do not positively contribute to the treatment process or the quality of the product.</p> |

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| <b>SO.165.7.NY.</b> Organic waste processing (OWP) facilities used solely for research purposes (6 NYCRR 360-5.9) [Added March 2004]. | <p>Verify that OWP facilities used solely for research purposes are under the direction of a professional engineer licensed in the State of New York or a research scientist affiliated with an accredited university or research institution located within the State of New York.</p> <p>Verify that the OWP facility obtains a permit and complies with its requirements.</p> <p>Verify that the quantity of waste handled is limited to the amount necessary to address the research objectives.</p> <p>Verify that within 90 days of the expiration date of the research, development and demonstration permit, a project summary report is submitted to the department that includes the following information:</p> <ul style="list-style-type: none"> <li>- a summary of the project objectives, information gathered, analyses conducted, and project results</li> <li>- any operating problems, any other limitations encountered and areas of further study.</li> </ul> |



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| <b>SO.170</b><br><br><b>OTHER DISPOSAL UNITS</b><br><br><b>SO.170.1.NY.</b> Land application facilities for agricultural use of septage, biosolids, food processing waste and other solid waste require a permit or meet other restrictions (6 NYCRR 360-4.1 and 4.2) [Added March 2004]. | <p>(NOTE: This section applies to design and operation of land application facilities for agricultural use of septage, biosolids, food processing waste and other solid waste. Food processing waste does not include food waste in cans or other similar containers.)</p> <p>Verify that land application facilities obtain a permit.</p> <p>Verify that conditions of the permit are followed.</p> <p>(NOTE: Exemptions to this checklist item includes:</p> <ul style="list-style-type: none"> <li>- a land application facility for animal manure and associated bedding material</li> <li>- a land application and an associated storage facility for food processing wastes that are visually recognizable as a part of the plant or vegetable, aquatic plants or a combination of such wastes provided:               <ul style="list-style-type: none"> <li>- the waste is applied at or below agronomic rates</li> <li>- nuisance conditions such as odors are minimized</li> <li>- the facility is operated in a manner to minimize the potential for negative surface and ground water impacts</li> </ul> </li> <li>- land application and associated storage facilities for leaves and/or grass, provided the following conditions are satisfied:               <ul style="list-style-type: none"> <li>- all physical contaminants (plastic bags, branches, etc.) are removed prior to application of the waste</li> <li>- grass is applied at an agronomic rate, which does not exceed 20 tons per acre or a depth of one inch annually, and does not exceed 40 tons per acre during any three- year period</li> <li>- grass is not shredded</li> <li>- all leaves and grass are incorporated into the soil and minimal leaf or grass material is apparent on the soil surface after incorporation</li> <li>- grass is incorporated into the soil on the same day as it is land applied</li> <li>- leaves are incorporated into the soil within 7 days after application to the soil</li> <li>- the quantity of grass stored does not exceed 100 cubic yards</li> <li>- grass and leaves are stored at the application site for no more than seven days prior to incorporation into the soil and measures are taken to minimize material blowing off the site and odor generation.)</li> </ul> </li> </ul> <p>(NOTE: Some facilities may be eligible for registration with the Department rather than having to obtain permits. The requirements for registered facilities are addressed in Appendix 9-11.)</p> |
| <b>SO.170.2.NY.</b> Waste destined for land application   | <p>(NOTE: See SO.170.1.NY. for applicability and exemptions.)</p>  |

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| <p>must not exceed pollutant concentrations (6 NYCRR 360-4.6(a)) [Added March 2004].</p>  | <p>Verify that each waste source destined for land application does not exceed the pollutant concentrations found in Appendix 9-6, on a dry weight basis.</p> <p>(NOTE: If the waste contains pollutants at concentrations greater than those set forth an operating facility can not continue to operate until the generator has implemented an identification and abatement program and remains in compliance with the requirements for a period of at least six continuous months.)</p> <p>(NOTE: Wastewater and partially treated biosolids that are generated at one location and treated at another wastewater treatment facility prior to beneficial use are not considered waste sources subject to the criteria in this paragraph. The resultant biosolids generated for beneficial use are subject to this requirement.)</p>  |
| <p><b>SO.170.3.NY.</b> Land application facilities must meet location and rate restrictions. (6 NYCRR 360-4.6(b)) [Added March 2004].</p> | <p>(NOTE: See SO.170.1.NY. for applicability and exemptions.)</p> <p>Verify that land application meets the following restrictions:</p> <ul style="list-style-type: none"> <li>- does not occur on land with a slope exceeding 15 percent</li> <li>- land application of waste with a total solids content of less than 15 percent does not occur on land with a slope greater than 8 percent, unless applied by subsurface injection along paths parallel to contour lines for the land</li> <li>- occurs only on soils within one or more of the following soil texture classes: sandy loam, sandy clay loam, loam, silt loam, silt, sandy clay and clay loam</li> <li>- does not occur in a 100-year floodplain which results in washout of the solid waste applied</li> <li>- prohibited in floodplain areas designated as a floodway.</li> </ul> <p>Verify the land application rates meet the following restrictions:</p> <ul style="list-style-type: none"> <li>- does not exceed the agronomic rate or the rate of lime addition designed to achieve a soil pH value in an acceptable range for the crop grown, whichever results in a lower rate</li> <li>- sufficiently reduced to insure appropriate application rates are not exceeded if supplemental fertilizer or manure are going to be added to the site</li> <li>- does not cause contravention of groundwater and surface water standards.</li> </ul> <p>Verify that proper soil conservation practices and agricultural management practices are used to minimize runoff and soil loss through erosion.</p> <p>Verify that written permission from the landowners is obtained for all lands where land application will occur.</p> <p>Verify that a multi-party certificate indicating who will be responsible for each applicable operational requirement is completed and followed.</p> |
| <p><b>SO.170.4.NY.</b> Land application facilities must meet monitoring</p>   | <p>(NOTE: See SO.170.1.NY. for applicability and exemptions.)</p> <p>Verify that sufficient monitoring data is obtained to demonstrate compliance with</p>  |

| <b>COMPLIANCE CATEGORY:<br/>WASTEWATER MANAGEMENT<br/>New York Supplement</b>  |   |
|--|---|
| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p>recordkeeping and reporting requirements. (6 NYCRR 360-4.6(c)) [Added March 2004]</p>   | <p>the pathogen and vector attraction reduction requirements.</p> <p>Verify that the following information is retained:</p> <ul style="list-style-type: none"> <li>- a copy of the complete and final permit application.</li> <li>- if pollutant analyses are required, records of pollutant concentration including: <ul style="list-style-type: none"> <li>- date of sample collection, sampling location, sample type, and name of sampler</li> <li>- name of laboratory, analytical methods used, and quality assurance/quality control procedures</li> <li>- analytical results</li> </ul> </li> <li>- if required, records of the pathogen and vector attraction reduction method employed, including a description of how compliance was achieved, certification that the requirements were achieved, and applicable monitoring and analytical data.</li> </ul> <p>Verify that an annual report is submitted to the department's central office and appropriate regional office no later than March 1 of each year covering the previous calendar year</p> <p>Verify that the report includes:</p> <ul style="list-style-type: none"> <li>- the location of each field used for land application and the acreage used for land application</li> <li>- the crop(s) grown on each field and the timing of planting and harvesting</li> <li>- the total quantity of waste applied, including land application dates and quantity applied during each application on each field</li> <li>- calculations showing the hydraulic loading, nutrient loading, the cumulative load and site life (if required), for the fields used</li> <li>- all analytical results, including copies of all laboratory reports</li> <li>- monitoring data and information to demonstrate compliance with the pathogen and vector attraction reduction requirements, if required</li> <li>- a description of any difficulties encountered during land application, any complaints arising as a result of the land application operation and the corrective actions taken</li> <li>- a revised management plan for land application for the next year based on previous application rates and crop planting patterns for the next year and all calculations are included.</li> </ul> <p>(NOTE: See SO.170.1.NY. for applicability and exemptions.)</p> <p>Verify that the soil pH is adjusted to 6.5 standard units or higher prior to land application unless lime stabilized biosolids are used.</p> <p>Verify that, if lime stabilized biosolids are used, the soil pH is 6.5 standard units or higher after biosolids application.</p> |
| <p><b>SO.170.5.NY.</b> Biosolids land application facilities must meet additional management requirements (6 NYCRR 360-4.7(a)) [Added March 2004].</p> |   |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>SO.170.6.NY.</b> Biosolids land application facilities must meet pathogen and vector attraction reduction requirements (6 NYCRR 360-4.7(b)) [Added March 2004].</p>   | <p>Verify that land application does not adversely affect a threatened or endangered species or its designated critical habitat.</p> <p>Verify that the annual cadmium application rate does not exceed 0.45 pounds per acre.</p> <p>Verify that the metal loading does not exceed 20 percent of the cumulative loading limit found in Appendix 9-12 in any one year.</p> <p>(NOTE: See SO.170.1.NY. for applicability and exemptions.)</p> <p>Verify that one of the alternatives for pathogen and vector attraction reduction listed in Appendix 9-13 is followed.</p>  |
| <p><b>SO.170.7.NY.</b> Biosolids land application facilities must meet additional monitoring, record keeping and reporting requirements (6 NYCRR 360-4.7(c)) [Added March 2004; Citation Revised March 2008].</p> | <p>(NOTE: See SO.170.1.NY. for applicability and exemptions.)</p> <p>Verify that each biosolids source is analyzed annually in accordance with the following.</p> <ul style="list-style-type: none"> <li>- the parameters for analysis are found in Appendix 9-8</li> <li>- the minimum number of analyses, for each waste source, that are submitted with the application is dependent upon the amount of biosolids that will be land applied annually, according to Appendix 9-14</li> <li>- with the exception of pH and total solids, all results are reported on a dry-weight basis.</li> </ul> <p>(NOTE: Wastewater and partially treated biosolids or sludge that are generated at one facility and treated at another wastewater treatment facility prior to beneficial use is not considered waste sources subject to the criteria in this paragraph. The resultant biosolids generated for beneficial use are subject to this paragraph.)</p> <p>(NOTE: After the biosolids have been monitored for two years at the frequency outlined in this paragraph, the department may reduce the annual number of analyses required for Group C parameters if the biosolids quality is consistently below the quality standards.)</p> <p>Verify that annual soil sampling is completed.</p> <p>Verify that, if required annual groundwater monitoring is completed.</p> |
| <p><b>SO.170.8.NY.</b> Other solid waste land application</p>   | <p>(NOTE: In addition to the operational requirements identified in SO.170.2.NY. through SO.170.4.NY. the following operational criteria apply for a land</p>   |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p>facilities must meet additional operational requirements (6 NYCRR 360-4.8) [Added March 2004].</p> <p><b>SO.170.9.NY.</b> Land application facilities used solely for research purposes must obtain a permit and meet operational requirements (6 NYCRR 360-4.11) [Added March 2004].</p> | <p>application facility for solid waste other than biosolids or septage.)</p> <p>Verify that, if there is any domestic sewage or septage contribution to the treatment facility generating the waste, the waste treatment process satisfies the pathogen and vector attraction reduction requirements outlined in Appendix 9-13 unless it can be demonstrated that the sanitary waste is a minor portion of the waste stream and that Salmonella sp. bacteria, enteric viruses, and viable helminth ova are below detectable levels.</p> <p>Verify that the solid waste contains at least 1 percent total Kjeldahl nitrogen or at least 50 percent calcium carbonate equivalence, or provide sufficient documentation to demonstrate that the material is a benefit to the soil or plant grown.</p> <p>Verify that land application facilities used solely for research purposes are under the direction of a professional engineer licensed in the State of New York or a research scientist affiliated with an accredited university or research institution located within the State of New York.</p> <p>Verify that land application facilities used solely for research purposes obtain a permit and comply with its requirements.</p> <p>Verify that the land application site does not exceed 25 acres.</p> <p>Verify that the facility is developed, operated, monitored, and maintained in a nuisance-free manner that will be protective of the environment.</p> <p>Verify that a project summary report. Is submitted to the department, within 90 days after the expiration date of the research, development and demonstration permit and includes the following information:</p> <ul style="list-style-type: none"> <li>- a summary of the project objectives, information gathered, analyses conducted, and project results</li> <li>- any operating problems and other limitations encountered and areas requiring further study.</li> </ul> |

| <b>COMPLIANCE CATEGORY:<br/>SOLID WASTE MANAGEMENT<br/>New York Supplement</b> |           |   |
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| <b>REGULATORY<br/>REQUIREMENTS:</b>  |           | <b>REVIEWER CHECKS:<br/>March 2010</b>                                |
| <b>SO.175</b><br><br><b>OTHER TREATMENT /<br/>PROCESSING UNITS</b>             |           |   |
| <b>SO.175.1.NY.</b><br>January 1998].  | [Deleted] | (NOTE: This checklist item duplicates requirements found in SO.5.NY.) |
| <b>SO.175.2.NY.</b><br>March 2004].  | [Moved]   | (NOTE: Moved to ST.113.1.NY., March 2004.)                            |
| <b>SO.175.3.NY.</b><br>March 2004].  | [Moved]   | (NOTE: Moved to ST.113.2.NY., March 2004.)                            |
| <b>SO.175.4.NY.</b><br>March 2004].  | [Moved]   | (NOTE: Moved to ST.113.3.NY., March 2004.)                            |
| <b>SO.175.5.NY.</b><br>March 2004].  | [Moved]   | (NOTE: Moved to ST.113.4.NY., March 2004.)                            |
| <b>SO.175.6.NY.</b><br>March 2004].  | [Moved]   | (NOTE: Moved to ST.113.5.NY., March 2004.)                            |
| <b>SO.175.7.NY.</b><br>March 2004].  | [Moved]   | (NOTE: Moved to ST.113.6.NY., March 2004.)                            |
| <b>SO.175.8.NY.</b><br>March 2004].  | [Deleted] | (NOTE: Duplicated in SO.155.1.NY.)                                    |
| <b>SO.175.9.NY.</b><br>March 2004].  | [Moved]   | (NOTE: Moved to ST.113.7.NY., March 2004.)                            |

| <b>COMPLIANCE CATEGORY:</b><br><b>SOLID WASTE MANAGEMENT</b><br><b>New York Supplement</b> |  |
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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b> |
| <b>SO.175.10.NY.</b> [Moved<br>March 2004].  | (NOTE: Moved to ST.113.8.NY., March 2004.)   |

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|---|---|
| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>SO.180</b></p> <p><b>CLOSURE OF SOLID WASTE FACILITIES</b></p> <p><b>SO.180.1.NY.</b> Solid waste management facilities must meet specific closure requirements (6 NYCRR Section 360-1.14(w)).</p> <p><b>SO.180.2.NY.</b> Registered solid waste management facilities must meet specific closure requirements (6 NYCRR Section 360-1.8(h)(9) and 360-1.14(w)) [Added January 1998; Citation Revised March 2004].</p> | <p>Verify that, upon termination of use, the facility is properly closed and closure monitored and maintained so as to minimize the need for further maintenance or corrective actions and to prevent or remedy adverse environmental or health impacts.</p> <p>(NOTE: Termination of use includes those situations where a facility has not received solid waste for more than 1 yr, unless otherwise provided by permit, or if the permit has expired. Specific closure measures are subject to approval by the Department.)</p> <p>Verify that, upon termination of use, the facility is properly closed and closure monitored and maintained so as to minimize the need for further maintenance or corrective actions and to prevent or remedy adverse environmental or health impacts.</p> <p>(NOTE: Termination of use includes those situations where a facility has not received solid waste for more than 1 yr, unless otherwise provided by permit, or if the permit has expired. Specific closure measures are subject to approval by the Department.)</p> |



## Appendix 9-1

### Materials Not Considered Solid Waste

(Source: 6 NYCRR Section 360-1.15)

The following materials are not considered solid waste by New York:

1. domestic sewage
2. any mixture of domestic sewage and other wastes that pass through a sewer system to a publicly owned treatment works for treatment, except for any material that is introduced into such system in order to avoid the provisions of this section
3. industrial wastewater discharges that are actual point source discharges subject to permits under *Environmental Conservation Law* (ECL) article 17. Industrial wastewaters, while they are being collected, stored, or treated before discharge, and sludges that are generated by industrial wastewater treatment are solid wastes and are regulated by this section
4. irrigation return flows
5. radioactive materials that are source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (see Codes, Rules, and Regulations of the State of New York, Title 6, Chapter IV, Subchapter B, Part 360, Subpart 360-1, Section 360-1.3 (6 NYCRR 360-1.3))
6. materials subject to in situ mining techniques that are not removed from the ground as part of the extraction process
7. discarded materials that the Department has determined are being beneficially used pursuant to 6 NYCRR 360-1.15
8. materials including source separated recyclables that have been traditionally incorporated as a secondary material in the manufacturing process. In this context, manufacturing processes may include, but not be limited to, the production of:
  - a. inorganic chemicals
  - b. iron, steel and iron, and steel products
  - c. leather and leather products
  - d. nonferrous metals and nonferrous metal products
  - e. organic chemicals
  - f. plastic products and plastic resins
  - g. pulp and paper products
  - h. rubber and miscellaneous plastic products
  - i. textiles and textile products
  - j. household and business products
  - k. transportation equipment.

The following items are no longer considered solid waste when used as described:

1. materials identified as hazardous waste
2. compost and other redistribution and marketing products
3. unadulterated wood, wood chips, or bark from land clearing, logging operations, utility line clearing and maintenance operations, pulp and paper production, and wood products manufacturing, when these materials are placed in commerce for service as mulch, landscaping, animal bedding, erosion control, wood fuel production, and bulking agent at a compost facility
4. uncontaminated newspaper or newsprint when used as animal bedding
5. uncontaminated glass when used as a substitute for conventional aggregate in asphalt or subgrade applications
6. tire chips when used as aggregate for road base materials or asphalt pavements in accordance with New York State Department of Transportation standard specifications, or whole tires or tire chips when used for energy recovery
7. uncontaminated soil which has been excavated as part of a construction project, and which is being used as a fill material, in place of soil native to the site of disposition
8. nonhazardous, contaminated soil which has been excavated as part of a construction project, other than a Department-approved or undertaken inactive hazardous waste disposal site remediation program, and

which is used as backfill for the same excavation or excavations containing similar contaminants at the same site; excess materials on these projects are subject to the requirements in this section

9. nonhazardous petroleum contaminated soil which has been decontaminated to the satisfaction of the Department and is being used in a manner acceptable to the Department
10. solid wastes which are approved in advance, in writing, by the Department for use as daily cover material or other landfill liner or final cover system components when received at the landfill
11. recognizable, uncontaminated concrete and concrete products, asphalt pavement, brick, glass, soil, and rock placed in commerce for service as a substitute for conventional aggregate
12. nonhazardous petroleum contaminated soil when incorporated into asphalt pavement products by a producer authorized by the Department
13. unadulterated wood combustion bottom ash, fly ash, or combined ash when used as a soil amendment or fertilizer, provided the application rate of the wood ash is limited to the nutrient need of the crop grown on the land on which the wood ash will be applied and does not exceed 16 dry tons per acre per year
14. coal combustion bottom ash placed in commerce to serve as a component in the manufacture of roofing shingles or asphalt products; or as a traction agent on roadways, parking lots, and other driving surfaces
15. coal combustion fly ash or gas scrubbing byproducts placed in commerce to serve as an ingredient to produce lightweight block, lightweight aggregate, low strength backfill material, manufactured calcium chloride
16. coal combustion fly ash or coal combustion bottom ash placed in commerce to serve as a cement or aggregate substitute in concrete or concrete products; as raw feed in the manufacture of cement; or placed in commerce to serve as structural fill within building foundations when placed above the seasonal high groundwater table.

## Appendix 9-2

### Exempt Facilities

(Source: 6 NYCRR Section 360-1.7(b)) [Revised March 2006]

#### Exemptions

The following solid waste management facilities that do not manage used oil are exempt from regulation:

1. disposal areas located within the property boundaries of a single family residence or farm for solid waste generated from that residence or farm
2. disposal areas for waste pesticides by the farmer who used them if the farmer complies with pesticide requirements (see category PM.55 in the Pesticide Management section of the New York Supplement)
3. disposal areas located within the property boundaries of a farm for crop residuals, animal and aquacultural manure, animal and aquacultural carcasses and parts generated from a farm, and other similar solid waste generated by farm activities
4. transfer, temporary storage, treatment, incinerator and processing facilities (including mobile processing facilities which are temporarily brought onto the site), except regulated medical waste treatment facilities, located at a single or multiple family residence, school, park, industry, hospital, commercial establishment, correctional facility, or farm and used exclusively for the management of solid waste generated at that location or at a location under the same ownership within a single region of the department. In certain cases where the department determines that these activities pose an adverse impact on public health, safety, or the environment, the department may set time limitations on the activities covered under this exemption. For excavated petroleum contaminated soils, on-site storage is limited to 60 days unless otherwise approved by the department.
5. transfer, storage, treatment, incinerator, and processing facilities, except composting or other distribution and marketing facilities, located at publicly owned treatment works or other sewage treatment plants, and used exclusively for sewage sludge, septage, or leachate. Storage is limited to less than 18 mo
6. the initial site used for the collection of household hazardous waste and household medical waste for a cleanup day or similar event sponsored or cosponsored by a community or governmental organization on a not-for-profit basis, and designed to assist the public in disposing of unwanted pesticides and other household hazardous and medical waste if:
  - a. the sponsoring organization submits a detailed written plan at least 60 days before the date of the event and receives written approval prior to the event from the regional director of the Department's region where the cleanup will take place
  - b. all wastes are removed from the site within 3 days of collection
  - c. wastes are packaged, labeled, and manifested properly
  - d. all transportation of the wastes from the collection point is done in accordance with a permit
7. a transporter storing shipments of nonputrescible industrial and nonputrescible commercial waste, other than RMW, in containers or in vehicles at its own transfer facility for a period of five calendar days or less, if the transporter:
  - a. maintains a log of the time and date on which each container or transport vehicle of waste is received or shipped
  - b. does not open any container or transport vehicle for any purpose, including sampling, transfer, treatment, or addition of absorbent
  - c. stores the waste in a container or transport vehicle that meets the design requirements specified by the U.S. Department of Transportation for each type of waste stored. During storage and shipment, these containers or transport vehicles must be packaged, labeled, and marked in accordance with 49 CFR, parts 171, 173, 178, and 179
  - d. stores containers or transport vehicles in a manner which will not rupture the container or transport vehicle or cause it to leak
  - e. complies with the standards for hazardous waste discharges from transporters
  - f. immediately notifies the appropriate regional office of the Department in which a spill or leak occurs of that spill or leak
  - g. inspects the containers or transport vehicles daily for leaks and deterioration, caused by corrosion or other factors, and keeps a written log of the inspections

8. a facility that exclusively treats wastewater that is regulated under wastewater discharge requirements
9. solid waste from nonhazardous inactive landfills which has been excavated as part of a construction project and is being returned to the same excavation or other excavations containing similar solid waste or otherwise relocated within the landfill's existing footprint, provided the handling, relocation, and disposal practices are deemed acceptable to the Department in writing in advance
10. disposal areas for road-killed animals on local roads and state and county highways under the jurisdiction of government agencies. Such disposal areas must, however, be located on property owned by the government agency and within the highway right-of-way. Disposal areas must be a minimum of 50 ft from any residence, surface water, or any other disposal area for road-killed animals. No more than 10 road-killed animals may be placed in a single disposal area. Road-killed animals placed in disposal areas must be covered with at least 3 ft of excavated soil material and in no case shall be placed within groundwater. Mass burial of road-killed animals is not exempt. Acceptable alternatives for the disposal of road-killed animals include disposal at a Department-approved solid waste landfill, disposal at a rendering facility, or other means as approved by the Department
11. open burning of solid waste conducted in compliance with a restricted burning permit issued by the Department
12. individual graves for burial of animals, including pet cemeteries, provided mass burial of animal carcasses is not practiced.

### Appendix 9-3

#### Exemptions from Transportation Requirements

(Source: 6 NYCRR Section 364.1(e)) [Revised March 2004]

(e) Exemptions.

- (1) Rail, water and air carriers are exempt from the requirements of this Part.
- (2) Vehicles transporting the following regulated wastes are exempted from this Part, provided that no other regulated waste is intermixed, contained in, or otherwise included with such waste:
  - (i) vegetable oils and greases from restaurants and fast food operations;
  - (ii) tallow (animal fat);
  - (iii) food processing waste destined for use in other food or animal feed processes (except blood);
  - (iv) garbage and trash collected from cafeterias;
  - (v) food processing residues which are recognizable as part of the plant or vegetable, including, but not limited to cabbage leaves, bean snips, onion skins, apple pomace and grape pomace (except brewery wastes);
  - (vi) scraps, including but not limited to plastic, rubber, paper, cardboard, wood chips, glass and metal;
  - (vii) grubbing, construction and renovation debris, such as roots, stumps, bricks, cement, asphalt, blacktop, stone and like materials, except asbestos;
  - (viii) agricultural waste, including but not limited to crop residues and animal manure productively employed in agriculture;
  - (ix) nonhazardous dredge or fill material;
  - (x) nonhazardous bottom and fly ash from incinerators and resource recovery facilities;
  - (xi) foundry sand containing no phenols (less than one part per billion);
  - (xii) empty drums or containers destined for reconditioning or being returned to the original manufacturer;
  - (xiii) empty food containers being collected, transported or stored for recycling or reuse;
  - (xiv) samples shipped to laboratories solely for analysis;
  - (xv) scrap lead-acid automotive batteries destined for recovery;
  - (xvi) waste transported by a public utility vehicle where the transportation of such waste is incidental to the primary function of the vehicle whenever the waste is brought to a utility-owned collection facility for storage prior to treatment or disposal;
  - (xvii) waste collected, transported or transferred wholly on-site by the person responsible for the origination, generation or occurrence of such waste, provided that storage, treatment and disposal of waste upon those premises are authorized pursuant to this Title. (As used in this subparagraph, on-site means the same or geographically contiguous property. It may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a crossroads intersection, and access is by crossing, as opposed to going along, the right-of-way. Noncontiguous properties owned by the same person, but connected by a right-of-way which that person controls and to which the public does not have access, are also considered on-site property.);
  - (xviii) pesticides, transported by the farmer who generated them, to a pesticide clean-up day collection site authorized pursuant to section 360.1(f)(1)(xi) or 373-1.1(d)(1)(xviii) of this Title; and
  - (xix) bottom ash from the burning of fossil fuel, provided that:
    - (a) the ash has been tested for toxicity by the owner or operator of the generating facility pursuant to a testing protocol approved by the commissioner, and certified to be nontoxic; and
    - (b) the ash is destined for use by a municipality or other governmental entity as a traction agent on roadways.
  - (xx) wastes transported during an explosive munitions emergency response as defined in section 370.2(b) conducted in accordance with section 373-1.1(d)(1)(xiii)(a)(4) of this Title.

## **Appendix 9-4**

### **Exclusions and Exemptions to the Medical Waste Definition**

(Source: 6 NYCRR Section 360-17.2)

#### **Exclusions**

hazardous waste identified or listed under the regulations in Part 371 of 6 NYCRR

household waste, as defined in 6 NYCRR 360

ash from incineration of RMW once the incineration process has been completed

residues from treatment and destruction processes once the waste has been both treated and destroyed

human corpses, remains, and anatomical parts that are intended for interment or cremation

#### **Exemptions**

samples of RMW transported offsite by USEPA or state-designated enforcement personnel for enforcement purposes are exempt from the medical waste requirements during the enforcement proceeding.

## Appendix 9-5

### Pathogen and Vector Attraction Reduction Requirements for OWP Facilities

(Source: 6 NYCRR Section 360-5.5(b)) [Added March 2004]

The following requirements apply to mixed solid waste and solid waste that contains any amount of human waste.

(1) One of the following alternatives (designated as Class A pathogen reduction) must be used to reduce pathogen content before the material leaves the facility. Alternative 2 is not applicable for composting. Alternative 4 or 5 can only be used if the process cannot produce operational data that could be used to meet another PR alternative.

(i) Class A - Alternative 1. Either the density of fecal coliform in the product is less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the product is less than three Most Probable Number per four grams of total solids (dry weight basis) at the time of product use or disposal and the waste must be treated by one of the following processes:

(a) Composting. Using the windrow composting method, the solid waste is maintained under aerobic conditions during the compost process. A minimum of five turnings is required during a period of 15 consecutive days when the temperature of the mixture is not less than 55 degrees Celsius.

Using the aerated static pile composting method or the within-vessel composting method, the temperature of the solid waste is maintained at 55 degrees Celsius or higher for at least three consecutive days.

(b) Heat drying. Waste is dried by direct or indirect contact with hot gases to reduce the moisture content of the waste to 10 percent or lower. One of the following must be achieved:

(1) either the temperature of the waste particles must exceed 80 degrees Celsius or

(2) the wet bulb temperature of the gas in contact with the waste as it leaves the dryer must exceed 80 degrees Celsius.

(c) Heat treatment. Liquid waste is heated to a temperature of 180 degrees Celsius or higher for at least 30 minutes.

(d) Thermophilic aerobic digestion. Liquid waste is agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the waste is at least 10 days at 55 degrees Celsius or greater.

(e) Beta ray irradiation. Waste is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (approximately 20 degrees Celsius).

(f) Gamma ray irradiation. Waste is irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium 137, at dosages of at least 1.0 megarad at room temperature (approximately 20 degrees Celsius).

(g) Pasteurization. The temperature of the waste is maintained at 70 degrees Celsius or higher for 30 minutes or longer.

(h) Other methods. Other methods or operating conditions may be approved by the department if the department determines that pathogens are reduced to an extent equivalent to the reduction achieved by the above methods.

(ii) Class A - Alternative 2. Treatment by thermophilic aerobic or anaerobic digestion. Either the density of fecal coliform in the product must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the product must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time of product use or disposal, and the temperature of the solid waste must be maintained at a specific value for a period of time, as follows:

(a) When the percent solids of the waste is seven percent or higher, the temperature of the waste must be 50 degrees Celsius or higher, the time period must be 20 minutes or longer, and the temperature and time period must be determined using the following equation, except when small particles of waste are heated by either warmed gases or an immiscible liquid.

$$D = 131,700,000$$

-----

$$100.1400 t$$

Where,

D = time in days.

t = temperature in degrees Celsius.

- (b) When the percent solids of the solid waste is seven percent or higher and small particles of waste are heated by either warmed gases or an immiscible liquid, the temperature and time period must be determined using the equation in clause (a) of this subparagraph. The temperature of the waste must be 50 degrees Celsius or greater and the time period must be 15 seconds or longer.
- (c) When the percent solids of the waste is less than seven percent and the time period is at least 15 seconds, but less than 30 minutes, the temperature and time period must be determined using the equation in clause (a) of this subparagraph.
- (d) When the percent solids of the waste is less than seven percent, the temperature of the waste is 50 degrees Celsius or higher, and the time period is 30 minutes or longer, the temperature and time period must be determined using the following equation:

$$D = \frac{50,070,000}{100.1400 t}$$

Where,

D = time in days.

t = temperature in degrees Celsius.

(iii) Class A - Alternative 3. Either the density of fecal coliform in the product must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the product must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time of product use or disposal and the following conditions must be satisfied:

- (a) The pH of the waste must be raised to above 12 and remain above 12 for at least 72 hours.
- (b) The temperature of the waste must remain above 52 degrees Celsius for 12 hours or longer during the period that the pH of the waste is above 12.
- (c) At the end of the 72-hour period during which the pH of the waste is above 12, the waste must be air dried to achieve a percent solids in the waste greater than 50 percent.

(iv) Class A - Alternative 4. Either the density of fecal coliform in the product must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the product must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time of product use or disposal, and the following conditions must be satisfied:

- (a) The density of enteric viruses in the product must be less than one Plaque-forming Unit per four grams of total solids (dry weight basis).
- (b) The density of viable helminth ova in the product must be less than one per four grams of total solids (dry weight basis).

(v) Class A - Alternative 5. Either the density of fecal coliform in the waste must be less than 1000 Most Probable Number per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the product must be less than three Most Probable Number per four grams of total solids (dry weight basis) at the time of product use or disposal, and the following conditions must be satisfied:

- (a) The waste must be analyzed prior to pathogen treatment to determine whether the waste contains enteric viruses.
- (b) When the density of enteric viruses in the waste prior to pathogen treatment is less than one Plaque-forming Unit per four grams of total solids (dry weight basis), the waste is Class A with respect to enteric viruses until the next monitoring episode for the waste.
- (c) If the density of enteric viruses in the waste prior to pathogen treatment is equal to or greater than one Plaque-forming Unit per four grams of total solids (dry weight basis), the waste is not considered Class A with respect to enteric viruses until the density of enteric viruses in the waste, after pathogen treatment is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) and the values or ranges of values for



the operating parameters of the pathogen treatment process (that produces the waste that meets the enteric virus density requirement) are documented.

- (d) After the enteric virus reduction in clause (c) of this subparagraph is demonstrated for the pathogen treatment process, the waste continues to be Class A with respect to enteric viruses when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in clause (c) of this subparagraph.
- (e) The waste must be analyzed prior to pathogen treatment to determine whether the waste contains viable helminth ova.
- (f) When the density of viable helminth ova in the waste prior to pathogen treatment is less than one per four grams of total solids (dry weight basis), the waste is Class A with respect to viable helminth ova until the next monitoring episode for the waste.
- (g) If the density of viable helminth ova in the waste prior to pathogen treatment is equal to or greater than one per four grams of total solids (dry weight basis), the waste is not considered Class A with respect to viable helminth ova until the density of viable helminth ova in the waste, after pathogen treatment, is less than one per four grams of total solids (dry weight basis), and the values or ranges of values for the operating parameters for the pathogen treatment process (that produces the waste that meets the viable helminth ova density requirement) are documented.
- (h) After the viable helminth ova reduction in clause (g) of this subparagraph is demonstrated for the pathogen treatment process, the waste continues to be Class A with respect to viable helminth ova when the values for the pathogen treatment process operating parameters are consistent with the values or ranges of values documented in clause (g) of this subparagraph.

(2) One of the following vector attraction reduction methods must be achieved before the material leaves the facility. Vector attraction reduction methods, except the methods found in subparagraphs 360-5.5(b)(2)(vi) - (viii), must be met either after meeting or at the same time the pathogen reduction requirements are met.

- (i) The mass of volatile solids in the waste must be reduced by a minimum of 38 percent.
- (ii) If the volatile solids reduction requirement cannot be met for an anaerobically digested waste, vector attraction reduction can be demonstrated by anaerobically digesting a portion of the previously digested waste in a laboratory bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. Vector attraction reduction is achieved if the bench-scale digestion produces less than a 17 percent reduction in volatile solids content.
- (iii) If the volatile solids reduction requirement cannot be met for an aerobically digested waste, vector attraction reduction can be demonstrated by aerobically digesting a portion of the previously digested waste that has a percent solids of two percent or less in a laboratory bench-scale unit for an additional 30 days at 20 degrees Celsius. Vector attraction reduction is achieved if the bench-scale digestion produces less than a 15 percent reduction in volatile solids content.
- (iv) The specific oxygen uptake rate (SOUR) for waste treated in an aerobic process must be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.
- (v) Waste must be treated by an aerobic process for a minimum of 14 days. Throughout that treatment time, the temperature of the waste must remain higher than 40 degrees Celsius and the average temperature of the waste must be higher than 45 degrees Celsius.
- (vi) The pH of the waste must be raised to 12 standard units or higher by alkali addition and, without the addition of more alkali, must remain at 12 or higher for two hours, and then must remain at 11.5 or higher for an additional 22 hours.
- (vii) For waste that does not contain untreated solids generated in a primary wastewater treatment process, the percent solids of the waste must be equal to or greater than 75 percent, prior to mixing with other materials, until use.
- (viii) For waste that contains untreated solids generated in a primary wastewater treatment process, the percent solids of the waste must be equal to or greater than 90 percent, prior to mixing with other materials, until use.

## Appendix 9-6

### Pollutant Limits - Class B Materials & Input to Class A Facilities

(Source: 6 NYCRR Section 360-5.10 Table 4) [Added March 2004]

| Parameter           | Monthly<br>Average Concentration<br>mg/kg, dry weight | Maximum Concentration<br>mg/kg, dry weight |
|---------------------|---|--|
| Arsenic (As)        | 41  | 75   |
| Cadmium (Cd)*       | 21  | 85   |
| Chromium (Cr-total) | 1000  | 1000                                       |
| Copper (Cu)         | 1500  | 4300                                       |
| Lead (Pb)           | 300   | 840  |
| Mercury (Hg)        | 10  | 57   |
| Molybdenum (Mo)     | 40  | 75   |
| Nickel (Ni)         | 200   | 420  |
| Selenium (Se)       | 100   | 100  |
| Zinc (Zn)           | 2500  | 7500                                       |

\* if the monthly average cadmium concentration exceeds 5 ppm, dry weight basis, the cadmium/zinc ratio must not exceed 0.015.

## Appendix 9-7

### Pollutant Limits - Products

(Source: 6 NYCRR Section 360-5.10 Table 7) [Added March 2004]

| Parameter           | Monthly<br>Average Concentration<br>mg/kg, dry weight | Maximum Concentration<br>mg/kg, dry weight |
|---------------------|---|--|
| Arsenic (As)        | 41  | 75   |
| Cadmium (Cd)*       | 10  | 85   |
| Chromium (Cr-total) | 1000  | 1000                                       |
| Copper (Cu)         | 1500  | 4300                                       |
| Lead (Pb)           | 300   | 840  |
| Mercury (Hg)        | 10  | 57   |
| Molybdenum (Mo)     | 40  | 75   |
| Nickel (Ni)         | 200   | 420  |
| Selenium (Se)       | 100   | 100  |
| Zinc (Zn)           | 2500  | 7500                                       |

\* if the monthly average cadmium concentration exceeds 5 ppm, dry weight basis, the cadmium/zinc ratio must not exceed 0.015.

## Appendix 9-8

### Parameters for Analysis - Biosolids/Sludge

(Source: 6 NYCRR Section 360-5.10 Table 1 and 2) [Added March 2004]

| Table 1: Parameters for Analyses |                  |               |
|----------------------------------|------------------|---------------|
| Group A                          | Group B          | Group C       |
| Total Kjeldahl Nitrogen          | Arsenic          | Extended      |
| Ammonia                          | Cadmium          | Parameters    |
| Nitrate                          | Chromium (total) | (see Table 2) |
| Total Phosphorous                | Copper           |               |
| Total Potassium                  | Lead             |               |
| pH                               | Mercury          |               |
| Total Solids                     | Molybdenum       |               |
| Total Volatile Solids            | Nickel           |               |
|                                  | Selenium         |               |
|                                  | Zinc             |               |

**Table 2: Extended Parameters for Analyses**

| POLLUTANT                           |                            | CAS      |
|-------------------------------------|----------------------------|----------|
| <b>VOLATILE ORGANIC COMPOUNDS</b>   |                            |          |
| 1                                   | Acrolein                   | 107-02-8 |
| 2                                   | Acrylonitrile              | 107-13-1 |
| 3                                   | Benzene                    | 71-43-2  |
| 4                                   | Bromoform                  | 75-25-2  |
| 5                                   | Carbon tetrachloride       | 56-23-5  |
| 6                                   | Chlorobenzene              | 108-90-7 |
| 7                                   | Chlorodibromomethane       | 124-48-1 |
| 8                                   | Chloroethane               | 75-00-3  |
| 9                                   | 2-chloroethylvinyl ether   | 110-75-8 |
| 10                                  | Chloroform                 | 67-66-3  |
| 11                                  | Dichlorobromomethane       | 75-27-4  |
| 12                                  | 1,1-dichloroethane         | 75-34-3  |
| 13                                  | 1,2-dichloroethane         | 107-06-2 |
| 14                                  | Trans-1,2-dichloroethylene | 156-60-5 |
| 15                                  | 1,1-dichloroethylene       | 75-35-4  |
| 16                                  | 1,2-dichloropropane        | 78-87-5  |
| 17                                  | 1,3-dichloropropene        | 542-75-6 |
| 18                                  | Ethylbenzene               | 100-41-4 |
| 19                                  | Methyl bromide             | 74-83-9  |
| 20                                  | Methyl chloride            | 74-87-3  |
| 21                                  | Methylene chloride         | 75-09-2  |
| 22                                  | 1,1,2,2-tetrachloroethane  | 79-34-5  |
| 23                                  | Tetrachloroethylene        | 127-18-4 |
| 24                                  | Toluene                    | 108-88-3 |
| 25                                  | 1,1,1-trichloroethane      | 71-55-6  |
| 26                                  | 1,1,2-trichloroethane      | 79-00-5  |
| 27                                  | Trichloroethylene          | 79-01-6  |
| 28                                  | Vinyl chloride             | 75-01-4  |
| <b>ACID-BASE-NEUTRAL COMPOUNDS</b>  |                            |          |
| <b>* Acid-extractable compounds</b> |                            |          |

|                                |                              |           |
|--------------------------------|------------------------------|-----------|
| 1                              | 4-chloro-3-methylphenol      | 59-50-7   |
| 2                              | 2-chlorophenol               | 95-57-8   |
| 3                              | 2,4-dichlorophenol           | 120-83-2  |
| 4                              | 2,4-dimethylphenol           | 105-67-9  |
| 5                              | 4,6-dinitro-2-methylphenol   | 534-52-1  |
| 6                              | 2,4-dinitrophenol            | 51-28-5   |
| 7                              | 2-nitrophenol                | 88-75-5   |
| 8                              | 4-nitrophenol                | 100-02-7  |
| 9                              | Pentachlorophenol            | 87-86-5   |
| 10                             | Phenol                       | 108-95-2  |
| 11                             | 2,4,6-trichlorophenol        | 88-06-2   |
| <b>*Base-Neutral compounds</b> |                              |           |
| 12                             | Acenaphthene                 | 83-32-9   |
| 13                             | Acenaphthylene               | 208-96-8  |
| 14                             | Anthracene                   | 120-12-7  |
| 15                             | Benzidine                    | 92-87-5   |
| 16                             | Benzo(a)anthracene           | 56-55-3   |
| 17                             | Benzo(a)pyrene               | 50-32-8   |
| 18                             | Benzo(b)fluoranthene         | 205-99-2  |
| 19                             | Benzo(g,h,i)perylene         | 191-24-2  |
| 20                             | Benzo(k)fluoranthene         | 207-08-9  |
| 21                             | Bis(2-chlorethoxy)methane    | 111-91-1  |
| 22                             | Bis(2-chloroethyl) ether     | 111-44-4  |
| 23                             | Bis(2-chloroisopropyl) ether | 108-60-1  |
| 24                             | Bis(2-ethylhexyl) phthalate  | 117-81-7  |
| 25                             | 4-bromophenyl phenyl ether   | 101-55-3  |
| 26                             | Butyl benzyl phthalate       | 85-68-7   |
| 27                             | 2-chloronaphthalene          | 91-58-7   |
| 28                             | 4-chlorophenyl phenyl ether  | 7005-72-3 |
| 29                             | Chrysene                     | 218-01-9  |
| 30                             | Di-n-butyl phthalate         | 84-74-2   |
| 31                             | Di-n-Octyl phthalate         | 117-84-0  |
| 32                             | Dibenzo(a,h)anthracene       | 95-50-1   |
| 33                             | 1,2-dichlorobenzene          | 53-70-3   |
| 34                             | 1,3-dichlorobenzene          | 541-73-1  |
| 37                             | Diethyl phthalate            | 84-66-2   |
| 38                             | Dimethyl phthalate           | 131-11-3  |
| 39                             | 2,4-dinitrotoluene           | 121-14-2  |
| 40                             | 2,6-dinitrotoluene           | 606-20-2  |
| 41                             | 1,2-diphenylhydrazine        | 122-66-7  |
| 42                             | Fluoranthene                 | 206-44-0  |
| 43                             | Fluorene                     | 86-73-7   |
| 44                             | Hexachlorobenzene            | 118-74-1  |
| 45                             | Hexachlorobutadiene          | 87-68-3   |
| 46                             | Hexachlorocyclopentadiene    | 77-47-4   |
| 47                             | Hexachloroethane             | 67-72-1   |
| 48                             | Indeno(1,2,3-cd)pyrene       | 193-39-5  |
| 49                             | Isophorone                   | 78-59-1   |
| 50                             | Naphthalene                  | 91-20-3   |
| 51                             | Nitrobenzene                 | 98-95-3   |
| 52                             | N-nitrosodipropylamine       | 621-64-7  |
| 53                             | N-nitrosodimethylamine       | 62-75-9   |
| 54                             | N-nitrosodiphenylamine       | 86-30-6   |
| 55                             | Phenanthrene                 | 85-01-8   |
| 56                             | Pyrene                       | 129-00-0  |
| 57                             | 1,2,4-trichlorobenzene       | 120-82-1  |

|                        |                          |            |
|------------------------|--------------------------|------------|
| <b>PESTICIDES/PCBs</b> |                          |            |
| 1                      | Aldrin                   | 309-00-2   |
| 2                      | Alpha-BHC                | 319-84-6   |
| 3                      | Beta-BHC                 | 319-85-7   |
| 4                      | Delta-BHC                | 319-86-8   |
| 5                      | Gamma-BHC [Lindane]      | 58-89-9    |
| 6                      | Alpha-chlordane          | 5103-71-9  |
| 7                      | Gamma-chlordane          | 5103-74-2  |
| 8                      | 4,4'-DDD [p,p'-TDE]      | 72-54-8    |
| 9                      | 4,4'-DDE [p,p'-DDX]      | 72-55-9    |
| 10                     | 4,4'-DDT                 | 50-29-3    |
| 11                     | Dieldrin                 | 60-57-1    |
| 12                     | Alpha-endosulfan         | 959-98-8   |
| 13                     | Beta-endosulfan          | 33213-65-9 |
| 14                     | Endosulfan sulfate       | 1031-07-8  |
| 15                     | Endrin                   | 72-20-8    |
| 16                     | Endrin aldehyde          | 7421-93-4  |
| 17                     | Heptachlor               | 76-44-8    |
| 18                     | Heptachlor epoxide       | 1024-57-3  |
| 19                     | PCB-1016 (Arochlor 1016) | 12674-11-2 |
| 20                     | PCB-1221 (Arochlor 1221) | 11104-28-2 |
| 21                     | PCB-1232 (Arochlor 1232) | 11141-16-5 |
| 22                     | PCB-1242 (Arochlor 1242) | 53469-21-9 |
| 23                     | PCB-1248 (Arochlor 1248) | 12672-29-6 |
| 24                     | PCB-1254 (Arochlor 1254) | 11097-69-1 |
| 25                     | PCB-1260 (Arochlor 1260) | 11096-82-5 |
| 26                     | Toxaphene                | 8001-35-2  |
| <b>Metals</b>          |                          |            |
| 1                      | Antimony                 | 7440-36-0  |
| 2                      | Beryllium                | 7440-41-7  |
| 3                      | Silver                   | 7440-22-4  |
| 4                      | Thallium                 | 7440-28-0  |
| 5                      | Cyanide                  | 57-12-5    |

## **Appendix 9-9**

### **Parameters for Analysis - Biosolids/MSW/Sludge Products** (Source: 6 NYCRR Section 360-5.10 Table 8) [Added March 2004]

Total Kjeldahl Nitrogen  
Fecal coliform or Salmonella sp. bacteria  
Ammonia  
Nitrate  
Total Phosphorus  
Total Potassium  
pH  
Total Solids  
Total Volatile Solids  
Arsenic  
Cadmium  
Chromium  
Copper  
Lead  
Mercury  
Molybdenum  
Nickel  
Selenium  
Zinc

## Appendix 9-10

**Annual Product Testing Frequency - Biosolids/Sludge/MSW**  
(Source: 6 NYCRR Section 360-5.10 Table 9) [Added March 2004]

| Average Product Generated<br>(Cubic yards per day) | Number of Analyses |
|--|--------------------|
| >50  | 52                 |
| 5-50   | 12                 |
| <5   | 6                  |



## Appendix 9-11

### Land Application Registration Restrictions

(6 NYCRR 360-4.2(b) [Added March 2004; Citation Revised March 2008])

#### b) Registration.

The following solid waste management facilities are eligible for the registration provisions of subdivision 360-1.8(h) of this Part if the facility is operated in compliance with the applicable requirements of subdivision 360-1.8(h) and this subdivision. Sufficient information must be submitted with the registration request to demonstrate that the facility will comply with the applicable criteria. Any eligible or registered facility which is not operated in compliance with these conditions requires a permit pursuant to this Part and will be subject to the applicable enforcement provisions.

- (1) A land application and a manure storage facility involving nonrecognizable food processing wastes or fish hatchery waste, provided the following conditions are satisfied:
  - (i) the facility complies with the operational requirements of subdivisions 360-4.6(a) and (b) of this Subpart, excluding paragraphs 360-4.6(b)(10) and (12). A minimum of one representative analysis of the waste for the parameters found in Group A and Group B of subdivision 360-4.4(a) must be submitted;
  - (ii) the volume of waste land applied is limited to prevent ponding, except for temporary conditions following rainfall events. If ponding occurs, land application ceases immediately;
  - (iii) land application on frozen or snow-covered ground is limited to land with a slope of less than 4 percent, unless the separation distance to a surface water and State regulated wetland is increased to 500 feet and berms are used;
  - (iv) dikes, berms, or other runoff control devices are used, if deemed necessary by the department;
  - (v) the application rate of whey does not exceed the nitrogen needs of the crop and a chloride loading of 170 lbs. per acre per year;
  - (vi) the waste is beneficial to the crop grown and the waste does not contain any human sanitary waste (e.g. domestic sewage, biosolids, septage) or it is demonstrated that the sanitary waste is a minor component of the waste stream and pathogenic organism content are below detectable levels in the waste;
  - (vii) a maximum of 10 percent of the total volume of a manure storage facility may consist of food processing waste, unless it can be demonstrated that the manure storage facility has been designed to minimize potential for negative ground water and surface water impacts. The land application of this mixture is not subject to the criteria in this paragraph, but should be conducted in accordance with acceptable agricultural practices; and
  - (viii) for land application sites located in the New York City watershed, application rates are based on the phosphorus needs of the crop grown, a Comprehensive Nutrient Management Plan has been developed for the farms involved, and the application sites have been clearly mapped and marked.
- (2) A land application facility for septage from one hauler using not more than two vehicles for collection related to land application, provided the following conditions are satisfied:
  - (i) The facility complies with the operational requirements of subdivision 360-4.6(b) of this Subpart, excluding paragraphs (4), (6), and (14).
  - (ii) Soil testing - one representative analysis for each 15 acres or fraction thereof is required once every three years of use, beginning in the first year septage is applied to a site. Soil analyses will occur prior to the first application for that year. The analysis must include nutrients (nitrogen, potassium, and phosphorus). This requirement applies to acreage used for septage application.
  - (iii) A minimum of 15 acres must be available for each vehicle. Vegetation must be grown at the application facility that is sufficient to utilize all the available nitrogen provided from septage application.
  - (iv) The application rate does not exceed 25,000 gallons per acre per year, or the rate determined by the following calculation, whichever is less:  
$$\text{Application Rate (gallons/acre/year)} = \text{Crop nitrogen needs (lbs. nitrogen/acre)} \times 385.$$
  
The application rate may be changed if the septage is altered (e.g., dewatered) prior to application.

- (v) For pathogen reduction, the pH of the septage is raised to 12 or higher by alkali addition and, without the addition of more alkali, the septage remains at 12 or higher for 30 minutes, and the following site restrictions must be followed:
    - (a) food crops with harvested parts that touch the septage/soil mixture and are totally above the land surface must not be harvested for 14 months after land application. Food crops with harvested parts below the surface of the land must not be harvested for 38 months after land application; and
    - (b) food crops grown above the soil with harvested parts that do not touch the septage/soil mixture, feed crops and fiber crops must not be harvested for at least 30 days after land application.
  - (vi) Annual groundwater monitoring may be required as determined by the Department.
  - (vii) The following records must be kept for at least five years after any application of septage to a site, must be available to the department on request, and shall be provided to the department in the annual report pursuant to paragraph 360-1.8(h)(8) of this Part:
    - (a) the location of the site of land application including either the street address or the longitude and latitude of the site (available from a USGS map);
    - (b) the total number of acres to which septage was applied and the total gallons of septage applied;
    - (c) the date of each application, the gallons of septage applied, and the acres used;
    - (d) pH data and related information to show compliance with pathogen and vector attraction reduction criteria;
    - (e) the crop grown; and
    - (f) the following certification statement, signed by the person responsible for land application of the septage:  
 "I certify, under penalty of law, that the information that will be used to determine compliance with Subpart 360-4 of 6 NYCRR Part 360 has been prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."
  - (viii) A copy of the validated registration must be kept in the appropriate vehicle.
  - (ix) Transition. The transition provision outlined in clause 360-1.7(a)(3)(v)(b) applies to these facilities.
- (3) A storage or transfer facility for septage from one hauler using no more than two vehicles for collection.
- (i) The minimum horizontal separation distances from the perimeter of the storage facility must meet the requirements found in paragraph 360-4.6(b)(1) of this Subpart, except that the minimum horizontal separation distance to a nearby residence, place of business, or public contact area must be at least 1,500 feet for surface impoundments.
  - (ii) Surface water must be directed away from the storage facility.
  - (iii) Vector and odor control measures must be implemented when necessary, as determined by the department.
  - (iv) Surface impoundments and open tanks must be properly fenced and posted or otherwise constructed to prevent unauthorized access, as determined by the department.
  - (v) All storage facilities must be completely emptied, cleaned, and inspected at least once every 12 months. The department must be notified at least one week before the cleaning operation is complete to afford the department the opportunity to inspect the facility before additional material is placed in the facility. Tanks must be tested for tightness biennially, with results sent to the appropriate regional office of the department. Any damage or deterioration revealed by the inspections must be repaired before that facility again receives waste.
  - (vi) Surface impoundments must be constructed above the 100-year flood elevation, and must be constructed with a liner system. The liner system must consist of either a minimum of two feet of compacted soil having a maximum remolded coefficient of permeability of  $1 \times 10^{-7}$  centimeters per second, or a synthetic material approved by the department. The soil material particles must be able to pass through a one inch screen.
  - (vii) Ground and/or surface water monitoring programs must be implemented, if required by the department.
  - (viii) Surface impoundments must maintain a minimum of two feet of freeboard and may be no deeper than 6 feet. The bottom of the impoundment liner must be a minimum of five feet above both seasonal high groundwater and bedrock.

- (ix) Storage facilities other than surface impoundments may be constructed of concrete, steel, or other material approved by the department. The storage facility must be designed with a minimum of two feet of freeboard.
  - (x) The transfer facility involves the movement of septage from one truck to another vehicle. The septage must not remain on either truck for more than seven days. The facility must be operated in nuisance-free manner with all spills cleaned up immediately.
  - (xi) Transition. The transition provision outlined in clause 360-1.7(a)(3)(v)(b) applies to these facilities, except the time frame for registering is 365 calendar days.
- (4) Disposal facilities for septage, provided the following conditions are satisfied:
- (i) A written closure and post closure plan is submitted to the department 180 days prior to the date that the disposal facility closes. The plan must describe how the facility will be closed and, at a minimum, must include the following: a discussion of how the leachate collection system will be operated and maintained for three years after the disposal facility closes if the facility has a liner and leachate collection system; a description of the system used to monitor for methane gas in the air in any structure within the boundaries of the disposal site and in the air at the property line of the disposal site; and a discussion of how public access to the disposal site will be restricted for three years after the facility closes.
  - (ii) If the site is sold, the owner of a disposal site must provide written notification to the subsequent owner of the site that septage was placed on the land.
  - (iii) Septage may not be placed in a disposal facility if it is likely to adversely affect a threatened or endangered species or its designated critical habitat.
  - (iv) The disposal facility must not restrict the flow of a base flood.
  - (v) If the disposal site is located in a seismic impact zone, the disposal facility must be designed to withstand the maximum recorded horizontal ground level acceleration.
  - (vi) The disposal facility must be located 60 meters or more from a fault that has displacement in Holocene time, unless otherwise approved by the department.
  - (vii) The disposal facility may not be located in an unstable area.
  - (viii) The minimum horizontal separation distances from the perimeter of the disposal facility must meet the requirements found in paragraph 360-4.6(b)(1) of this Subpart, except that the minimum horizontal separation distance to a nearby residence, place of business, or public contact area must be at least 1,500 feet.
  - (ix) Run-off must be directed away from the disposal facility.
  - (x) The leachate collection system for a disposal facility that has a liner and leachate collection system must be operated and maintained during the active life of the facility and for three years after closure.
  - (xi) Leachate from an active disposal facility that has a liner and leachate collection system must be collected and disposed in a manner approved by the department during the period the facility is open and for three years after the facility closes.
  - (xii) The concentration of methane gas in air in any structure located within the site may not exceed 25 percent of the lower explosive limit for methane gas during the period that the facility is open and the concentration of methane gas in air at the property line of the site may not exceed the lower explosive limit for methane gas during the period the facility is open.
  - (xiii) When a final cover is placed on the disposal facility at closure, the concentration of methane gas in air in any structure located within the site does not exceed 25 percent of the lower explosive limit for methane gas for three years after the facility closes and the concentration of methane gas in air at the property line of the site does not exceed the lower explosive limit for methane gas for three years after the facility closes, unless otherwise specified by the department.
  - (xiv) A food crop, a feed crop, or a fiber crop must not be grown on an active disposal facility.
  - (xv) Animals must not be grazed on an active disposal facility.
  - (xvi) Public access to a disposal site must be restricted for the period the facility is active and for three years after the facility is closed.
  - (xvii) Septage placed in a disposal facility must not contaminate groundwater. Results of a ground water monitoring program developed by a qualified ground water scientist or a certification by a qualified ground water scientist shall be used to demonstrate that the facility does not contaminate groundwater.
  - (xviii) Septage placed on a disposal facility must be covered with soil or other acceptable material at the end of each operating day.

- (xix) Air in structures within a disposal site and at the property line of the site must be monitored continuously for methane gas during the period that the disposal facility is in operation and for three years after the facility closes when a final cover is placed on the facility.
- (xx) The following information must be developed and retained for five years:
  - (a) The following certification statement:

"I certify, under penalty of law, that the management practices and the vector attraction reduction requirements in Subpart 360-4 have been met. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the vector attraction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."
  - (b) A description of how the requirements have been satisfied.
- (xxi) Transition. The transition provision outlined in clause 360-1.7(a)(3)(v)(b) applies to these facilities, except the time frame for registering is 365 calendar days.

## Appendix 9-12

### Cumulative Metal Loading Limits

(NYCRR 360-5.10 Table 5) [Added March 2004; Citation Revised March 2008]

|          | Cumulative Loading Limit (lbs./acre) |                      |
|----------|--------------------------------------|----------------------|
| Metal    | Ag. Soil Groups 1-3                  | Ag. Soil Groups 4-10 |
| Cadmium  | 3                                    | 4                    |
| Chromium | 300                                  | 446                  |
| Copper   | 75                                   | 112                  |
| Lead     | 267                                  | 267                  |
| Nickel   | 30                                   | 45                   |
| Zinc     | 150                                  | 223                  |

## Appendix 9-13

### **Pathogen and Vector Attraction Reduction Requirements for Biosolids Land Application Facilities** (NYCRR 360-4.7(b)) [Added March 2004]

(1) One of the following alternatives, designated as Class B pathogen reduction, must be used to significantly reduce pathogens in the biosolids prior to land application:

(i) Class B - Alternative 1. The biosolids must be treated by one of the following processes:

- (a) Aerobic digestion. Biosolids are agitated with air or oxygen to maintain aerobic conditions for a mean cell residence time of at least 40 days at 20 degrees Celsius or greater or at least 60 days if the temperature is less than 20 degrees Celsius but greater than or equal to 15 degrees Celsius.
- (b) Air drying. Biosolids are dried on sand beds or on paved or unpaved basins, at a maximum depth of nine inches. The biosolids must dry for a minimum of three months. During at least two of the three months, the ambient average daily temperature must be above zero degrees Celsius.
- (c) Anaerobic digestion. Biosolids are treated in the absence of air for a mean cell residence time of at least 15 days at 35 degrees Celsius or greater or at least 60 days at less than 35 degrees Celsius but greater than or equal to 20 degrees Celsius.
- (d) Composting. Using the within-vessel, aerated static pile or windrow composting methods, the temperature of the biosolids is raised to 40 degrees Celsius or higher and remains at 40 degrees Celsius or higher for five consecutive days. For at least 4 consecutive hours during the five days, the temperature in the compost pile must exceed 55 degrees Celsius.
- (e) Lime stabilization. Sufficient lime must be added to the biosolids to raise the pH of the biosolids to 12 standard units and maintain this pH for a period of at least two hours.
- (f) Other methods. Other methods or operating conditions may be acceptable if pathogens are reduced to an extent equivalent to the reduction achieved by any of the above methods and must be approved by the department.

(ii) Class B - Alternative 2. The geometric mean of the density of fecal coliform of seven analyses representative of the waste to be land applied must be less than either 2,000,000 Most Probable Number per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis). The seven samples must be taken over a 14-day period.

(2) One of the following vector attraction reduction requirements must be achieved:

- (i) The mass of volatile solids in the biosolids is reduced by a minimum of 38 percent.
- (ii) If the volatile solids reduction requirement cannot be met for anaerobically digested biosolids, vector attraction reduction can be demonstrated by anaerobically digesting a portion of the previously digested biosolids in a laboratory bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. Vector attraction reduction is achieved if the bench-scale digestion produces less than a 17 percent reduction in volatile solids content.
- (iii) If the volatile solids reduction requirement cannot be met for aerobically digested biosolids, vector attraction reduction can be demonstrated by aerobically digesting a portion of the previously digested biosolids that has a percent solids of 2 percent or less in a laboratory bench-scale unit for an additional 30 days at 20 degrees Celsius. Vector attraction reduction is achieved if the bench scale digestion produces less than a 15 percent reduction in volatile solids content.
- (iv) The specific oxygen uptake rate (SOUR) for biosolids treated in an aerobic process must be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.
- (v) Biosolids are treated by an aerobic process for a minimum of 14 consecutive days. Throughout that treatment time, the temperature of the biosolids must remain higher than 40 degrees Celsius and the average temperature of the biosolids must be higher than 45 degrees Celsius.

- (vi) The pH of the biosolids must be raised to 12 standard units or higher by alkali addition and, without the addition of more alkali, must remain at 12 standard units or higher for two hours and then remain at 11.5 standard units or higher for an additional 22 hours.
- (vii) For biosolids that do not contain untreated solids generated in a primary wastewater treatment process, the percent solids of the biosolids must be equal to or greater than 75 percent, prior to mixing with other materials, until land application.
- (viii) For biosolids that contain untreated solids generated in a primary wastewater treatment process, the percent solids of the biosolids must be equal to or greater than 90 percent, prior to mixing with other materials, until land application.
- (ix) Biosolids must be injected below the surface of the land. No significant amount of biosolids may be present on the land surface within one hour after the biosolids are injected.
- (x) Biosolids must be incorporated into the soil within six hours after application on the land.

(3) The following site restrictions must be followed:

- (i) Public access to land with a high potential for public exposure must be restricted during land application and for at least one year after land application. Public access to land with a low potential for public exposure must be restricted during land application and for at least 30 days after application. Access must be controlled during that period by the use of posted signs. In sensitive areas, the Department may require the use of fences and gates or other appropriate means.
- (ii) Food crops with harvested parts that are totally above the land surface must not be harvested for 14 months after land application. Food crops with harvested parts below the surface of the land must not be harvested for 38 months after land application.
- (iii) Food crops grown above the soil with harvested parts that do not touch the biosolids/soil mixture, feed crops and fiber crops must not be harvested for at least 30 days after land application.
- (iv) Animals must not be grazed on the land for at least 30 days after land application.
- (v) Turf grown on land where biosolids are applied must not be harvested for one year after land application when the harvested turf will be placed on either land with a high potential for public exposure or a lawn.

## Appendix 9-14

### Analyses Required During Operation - Biosolids (6 NYCRR 360-5.10 Table 6) [Added March 2004]

| Biosolids Used<br>(Dry tons/year) | Minimum Number of Analyses |         |
|-----------------------------------|----------------------------|---------|
|                                   | Groups A & B               | Group C |
| >1000                             | 12                         | 1       |
| 200 to 1000                       | 6                          | 1       |
| 25 to 199                         | 4                          | 1       |
| <25                               | 2                          | 0       |





**SECTION 10**  
**STORAGE TANK MANAGEMENT**  
**New York Supplement, March 2010**

This section covers the state requirements for Storage Tank Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

**Definitions**

- *Aboveground Tank* - any stationary tank with a capacity of 185 gal or more that is not entirely covered with earth or other backfill material, or any stationary tank with a capacity of 180 gal or more which can be inspected in a subterranean vault (Codes, Rules, and Regulations of the State of New York, Title 6, Chapter V, Subchapter D, Part 596, Section 596.1 (6 NYCRR 596.1) [Revised January 1998].
- *Aboveground Tank* - any stationary tank which is not entirely covered with earth or other material, or any tank which can be inspected in a subterranean vault (6 NYCRR 612.1) [Added March 2005].
- *Ancillary Equipment* - any device including, but not limited to, hoses, piping, fittings, fixtures, gages, alarms, rupture disks, pressure release valves, flanges, or valves and pumps that are used to distribute, meter, or control the flow of a hazardous substance to and from a storage tank (6 NYCRR 596.1).
- *Assembly Line Tanks* - tanks used for the production of a manufactured product, such as dispensing vats, weigh tanks or volumetric measuring devices, metal cleaning dip tanks, electroplating tanks, and cutting fluid reservoirs (6 NYCRR 596.1) [Added January 1998].
- *Best Management Practice Plans* or *BMP's* - plans designed to prevent or minimize the release of hazardous substances into the environment. BMP's can include, but are not limited to, spill reporting procedures, risk identification and assessment, employee training, inspections and records, preventive maintenance, good housekeeping, materials compatibility, structural measures and security (6 NYCRR 596.1) [Added January 1998].
- *Bulk Storage Facility* - a site which has one or more storage tank systems (6 NYCRR 596.1) [Revised January 1998].
- *Capacity* - the total volume of the tank measured in U.S. gallons, unless otherwise specified (6 NYCRR 596.1).
- *Carrier* - a person who transports and transfers petroleum from one pipe or tank to another (6 NYCRR 612.1) [Added March 2005].
- *Cathodic Protection* - a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current (6 NYCRR 596.1) [Added January 1998].
- *Cathodic Protection* - corrosion protection for an underground metal tank or pipe by causing a continuous electric current to flow from one or more electrodes or a sacrificial anode to the protected structure (6 NYCRR 612.1) [Added March 2005].
- *Change-In-Service* - the material stored within a tank is switched from a hazardous substance to a non-hazardous substance, a nonhazardous substance to a hazardous substance or from one hazardous substance to another (6 NYCRR 596.1) [Added January 1998].

- *Combined Storage Capacity* - the sum of the design storage capacity of each tank at a facility which has not been permanently closed (6 NYCRR 612.1).
- *Commissioner* - the Commissioner of Environmental Conservation or a duly authorized representative (6 NYCRR 364.1(c)).
- *Corrosion Resistant* (when referring to an underground tank) - any tank which meets standards for new underground tanks specified in section 614.3 of this Title. When referring to a pipe, it - any pipe which meets standards for new underground pipe specified in section 614.14 of this Title (6 NYCRR 612.1) [Added March 2005].
- *Container* - any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled (6 NYCRR 360-14.2).
- *Containment or To Contain* - all actions to limit or prevent the spread of a petroleum discharge (6 NYCRR 611.2).
- *Department* - the New York State Department of Environmental Conservation (6 NYCRR 596.1 and 612.1) [Citation Revised March 2005].
- *Discharge* - any intentional or unintentional action or omission resulting in the releasing, spilling, leaking, pumping, pouring, emitting, emptying, or dumping of petroleum into the waters of the state or onto lands from which it might flow or drain into said waters, or into waters outside the jurisdiction of the state when damage may result to the lands, waters, or natural resources within the jurisdiction of the state, excepting discharges pursuant to and in compliance with the conditions of a valid state or Federal permit (6 NYCRR 611.2 and 612.1) [Citation Revised March 2005].
- *Disposal* - the abandonment, discharge, deposit, injection, dumping, spilling, leaking, or placing of any waste or hazardous waste on or into any lands or waters of the state so that such waste or hazardous waste or any related constituent thereof may enter the environment or be emitted into the air or be discharged into any waters, including groundwaters thereof. Disposal also means the thermal destruction of waste or hazardous waste and the burning of such wastes as fuel for the purpose of recovering usable energy (6 NYCRR 364.1(c)).
- *Environment* - any water, water vapor, land including land surface or subsurface, air, fish, wildlife, biota, and all other natural resources (6 NYCRR 596.1).
- *Existing Facility* - a facility that has been constructed and is capable of being operated as of 26 January 1985 (6 NYCRR 612.1).
- *Existing Storage Tank* - a storage tank which has been constructed and is capable of being operated as of 11 August 1994 (6 NYCRR 596.1) [Revised January 1998].
- *Facility* - a site which has one or more storage tank systems (6 NYCRR 596.1) [Revised January 1998].
- *Facility or Storage Facility* - one or more stationary tanks, including any associated intra-facility pipelines, fixtures or other equipment, which have a combined storage capacity of over 1,100 gallons of petroleum at the same site. A facility may include aboveground tanks, underground tanks or a combination of both. Pipelines which enter or leave the site and nonstationary tanks are not part of the facility (6 NYCRR 612.1) [Added March 2005].
- *Flash point* - the temperature at which a liquid or volatile solid gives off vapor sufficient to form an ignitable mixture with air near the surface of the liquid or solid (6 NYCRR 596.1) [Revised January 1998].
- *Fuel Oil* - any virgin distillate oil, virgin residual oil, re-refined oil or a blend of these (6 NYCRR 225-2.2).

- *Handbook* - the New York State Water Quality Accident Contingency Plan and Handbook (6 NYCRR 611.3).
- *Hazardous Substance* - any substance listed as a hazardous substance in 6 NYCRR 597 (see also TEAM Guide Appendix 3-1) or a mixture thereof. Petroleum is not considered a hazardous waste under these requirements (6 NYCRR 595.1).
- *Incompatible* - those substances or materials which if allowed to come in contact, may pose an adverse environmental impact such as releasing a toxic gas or vapor, causing or intensifying a fire, creating an explosion, or causing any other adverse reaction which may threaten human health, safety, welfare or the environment (6 NYCRR 596.1) [Revised January 1998].
- *Leak Monitoring System* - a leak detection system as required in sections 614.5, 614.11 and 614.14(g)(3) of this Title (6 NYCRR 612.1) [Added March 2005].
- *Lining* - a coating of a non-corrodible material resistant to the product stored and bonded firmly to the interior surface of the tank (6 NYCRR 596.1 and 612.1) [Revised January 1998; Citation Revised March 2005].
- *Lubricating Oil* - all oil suitable for use as a lubricant, or solid for use as a lubricant (6 NYCRR 360-14.2).
- *Mixture* - a heterogeneous association of substances where the various individual substances retain their essential original properties. The term mixture includes solutions (but does not include alloys or amalgams) where one or more active ingredients are hazardous substances. Mixtures are regulated if they contain 1 percent or more by volume or weight of at least one hazardous substance (6 NYCRR 596.1).
- *New Facility* - a facility which is not an existing facility (6 NYCRR 612.1).
- *New Storage Tank* - a tank which is not an existing storage tank (6 NYCRR 596.1) [Revised January 1998].
- *Non-Stationary Tank* - any tank that in practice and design is mobile, including tanks on wheels, trolleys, skids, pallets, or rollers, and vessels such as a 55-gal drum (6 NYCRR 612.1).
- *Oil Production Facility* - all wells, flowlines, separation equipment, storage facilities, gathering lines and auxiliary nontransportation-related equipment used for the storage and handling of unrefined petroleum (6 NYCRR 612.1) [Added March 2005].
- *Operator* - any person who leases, operates, controls or supervises a facility (6 NYCRR 612.1) [Added March 2005].
- *Out-of-Service* - a facility or portion thereof no longer in use. Facilities or tanks that are used for seasonal storage, for surcharge storage, or for standby storage are not considered out-of-service (6 NYCRR 612.1).
- *Overfill* - a release or spill that occurs when a storage tank is filled beyond its capacity (6 NYCRR 595.1).
- *Owner* - any person who has legal or equitable title to a facility (6 NYCRR 612.1) [Added March 2005].
- *Permanently Closed* - an out-of-service storage tank or facility which has been closed in a manner prescribed by 6 NYCRR 613.9(b) (6 NYCRR 612.1).
- *Person* - any individual, public or private corporation, political subdivision, government agency, municipality, industry, copartnership, association, firm, trust, estate or any other legal entity (6 NYCRR 612.1) [Added March 2005].
- *Petroleum* - oil or petroleum of any kind and in any form including, but not limited to, oil, petroleum fuel oil, oil sludge, oil refuse, oil mixed with other waste, crude oil, gasoline, and kerosene (6 NYCRR 597.1).

- *Petroleum* - any petroleum-based oil of any kind which is liquid at 20°C under atmospheric pressure and has been refined, rerefined, or otherwise processed for the purpose of being burned as a fuel to produce heat or usable energy, or which is suitable for use as a motor fuel or lubricant in the operation or maintenance of an engine. Waste oil which has been reprocessed or rerefined and which is being stored for sale or use as fuel or lubricant is considered petroleum for purposes of this Part (6 NYCRR 612.1) [Added March 2005].
- *Piping or Piping System* - a fixed or permanent pipe including attached equipment and components used to convey, distribute, mix, separate, discharge, meter, control, or stop the flow of a hazardous substance to or from a storage tank (6 NYCRR 596.1).
- *Process Tank* - a vessel or other equipment used to mix or physically, chemically or biologically change a hazardous substance. The term process tank does not include tanks used to store hazardous substances prior to their introduction into the process, or tanks used to store substances as intermediates, by-products or finished products of the process. Examples of process tanks include, but are not limited to, flow-through chemical reactor tanks, batch tanks and mixing hoppers. Feed tanks upstream of the process are considered storage tanks for the purposes of this Part (6 NYCRR 596.1) [Revised January 1998].
- *Reconditioned* - any tank which is rehabilitated by installing an interior liner or which is permanently repaired in a manner prescribed by sections 614.6 and 614.12 of this Title (6 NYCRR 612.1) [Added March 2005].
- *Release* - any unauthorized pumping, pouring, emitting, emptying, overfilling, spilling, leaking, leaching, or disposing, directly or indirectly, of a hazardous substance or any other substance which results in the formation of a hazardous substance upon release so that the substance, or any related constituent thereof, or any degradation product of such a substance or of a related constituent thereof, may enter the environment (6 NYCRR 595.1).
- *Repair* - the work necessary to restore a storage tank or component to a safe and satisfactory operating condition provided that in all cases the storage tank or component design must continue to comply with the requirements herein, that special service requirements do not restrict such work, and the basic design concept is not altered (6 NYCRR 596.1).
- *Reportable Quantity* - the amount of a hazardous substance that must be reported to the Department in the event of a release, spill, or overfill. The reportable quantity for mixtures is the amount of the hazardous substance components of a mixture. Reportable quantities are listed in 6 NYCRR 597.2 (see also TEAM Guide Appendix 3-1) (6 NYCRR 595.1).
- *Secondary Containment* - a dike, remote impoundment, or any other containment area which protects a tank, pipe, or transfer station from damage due to vehicle traffic, fire exposure, spills from nearby tanks and which prevents any material spilled or released from reaching the land or water outside the containment area before clean-up occurs (6 NYCRR 596.1).
- *Secondary Containment* - containment which prevents any materials spilled or leaked from reaching the land or water outside the containment area before cleanup occurs (6 NYCRR 612.1) [Added March 2005].
- *Spill or Spillage* - any escape of a substance from the containers employed in the normal course of storage, transfer, processing, or use (6 NYCRR 595.1 and 612.1) [Citation Revised March 2005].
- *Stationary Tank* - all underground tanks or any aboveground storage tank (AST) which is nonmobile. Examples of stationary ASTs include tanks which may rest on the ground or may be fixed or permanently in place on foundations, racks, cradles, or stilts (6 NYCRR 612.1).
- *Storage Facility* - a site which has one or more storage tank systems (6 NYCRR 596.1) [Revised January 1998].

- *Storage Tank or Storage Tank System* - an aboveground tank, an underground tank or a non-stationary tank, and any associated piping, lines, dikes, curbs, transfer stations, and ancillary equipment (6 NYCRR 596.1) [Revised January 1998].
- *Substantially Modified Facility* - any existing facility which has been modified in one or more of the following ways: (6 NYCRR 612.1) [Added March 2005]
  - i. one or more new stationary tanks have been added;
  - ii. an existing stationary tank has been replaced, reconditioned or permanently closed; or
  - iii. a leaking storage tank has been replaced, repaired or permanently closed.
 The repair, replacement or installation of a piping system or other equipment does not substantially modify a facility.
- *Tank* - a container or other holding vessel designed to store a hazardous substance which is constructed of nonearthen materials (e.g., concrete, steel, plastic) which provide structural support (6 NYCRR 595.1).
- *Tightness Test* - a test which is performed in a manner consistent with the criteria set forth in section 613.5(a)(6) of this Title (6 NYCRR 612.1) [Added March 2005].
- *Transfer* - the movement of a hazardous substance between a storage tank and another tank or container, as contrasted to feeding to a use or application device (6 NYCRR 596.1).
- *Transfer Station* - an area where pipes or hoses are connected and disconnected for the purpose of emptying and filling a storage tank. This includes, but is not limited to, railways, roads, containment basins, curbs, collection sumps, and impervious pads, where a vehicle or container is located to off-load or receive a hazardous substance, where a coupling to a transfer line is made for the purpose of hazardous substance transfer, or where a system to collect and contain spills resulting from transfer operations is located (6 NYCRR 596.1).
- *Underground Storage Tank* - any tank or other vessel used for the storage of a hazardous substance which is completely covered with earth or other backfill material. Tanks in subterranean vaults accessible for visual inspection are considered aboveground tanks for the purposes of this section (6 NYCRR 596.1).
- *Underground Tank* - any tank completely covered with earth or other material. Tanks in subterranean vaults accessible for inspections are considered aboveground tanks for the purpose of this Part (6 NYCRR 612.1) [Added March 2005].
- *Unprotected Tank* - any underground tank which does not meet standards specified in section 614.3 of this Title. Examples of unprotected tanks include, but are not limited to, bare steel tanks; steel tanks which have been rehabilitated with an interior lining; steel tanks with exterior coatings of paint, asphalt, or other similar material; steel tanks which have been retrofitted with cathodic protection; and permeable concrete encased bare steel tanks (6 NYCRR 612.1) [Added March 2005].
- *Waters or Waters of the State* - include lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial limits of the State of New York, and all other bodies of surface or underground waters, natural or artificial inland or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction (6 NYCRR 596.1 and 612.1) [Citation Revised March 2005].
- *Working Capacity* - the total capacity of a storage tank less an allowance for expansion and freeboard (6 NYCRR 596.1 and 612.1) [Citation Revised March 2005].

**STORAGE TANK MANAGEMENT  
GUIDANCE FOR NEW YORK CHECKLIST USERS**

**REFER TO  
CHECKLIST ITEMS:**

|   |                                    |
|---|------------------------------------|
| Missing Checklist Items   | ST.2.1.NY.                         |
| All Storage Tanks   | ST.4.1.NY. through ST.4.6.NY.      |
| Aboveground Storage Tanks   | ST.5.1.NY. through ST.5.8.NY.      |
| Emissions/Discharges from POL Storage Vessels   | ST.15.1.NY. through ST.15.10.NY.   |
| UST State-Specific  | [Deleted]                          |
| New or Upgraded USTs  | ST.35.1.NY. through ST.35.6.NY.    |
| Release Detection for USTs  | ST.65.1.NY. through ST.65.5.NY.    |
| Changes in Service or Closure of USTs   | ST.95.1.NY.                        |
| Hazardous Waste Storage Tanks   |                                    |
| Small Quantity Generators (SQGs)  | ST.100.1.NY.                       |
| Generators  | ST.105.1.NY. and ST.105.2.NY.      |
| TSD Facilities  | ST.110.1.NY. through ST.110.7.NY.  |
| Solid Waste Storage Tanks   | ST.113.1.NY. through ST.113.8.NY.  |
| Used Oil Storage Tanks  |                                    |
| State Specific Requirements   | ST.139.1.NY.                       |
| Other Storage Tanks   | ST.155.1.NY. through ST.155.36.NY. |
| (NOTE: See section 3 of this protocol, <i>Hazardous Materials Management</i> for regulations regarding hazardous substance releases, spill prevention reports, and a list of hazardous substances.) |                                    |
| Storage Tank Disposal   | ST.160.1.NY.                       |

| <b>COMPLIANCE CATEGORY:<br/>STORAGE TANK MANAGEMENT<br/>New York Supplement</b>  |   |
|--|---|
| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>ST.2.</b></p> <p><b>MISSING CHECKLIST<br/>ITEMS</b></p> <p><b>ST.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |



| <b>COMPLIANCE CATEGORY:<br/>STORAGE TANK MANAGEMENT<br/>New York Supplement</b>   |  |
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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>ST.4.</b></p> <p><b>ALL STORAGE TANKS</b></p> <p><b>ST.4.1.NY.</b> All aboveground and underground storage petroleum storage facilities must be registered with the Department (6 NYCRR 612.1(b) and 612.2) [Revised March 2005; Citation Revised March 2008].</p> <p><b>ST.4.2.NY.</b> Fill ports at registered petroleum storage facilities must be color-coded (6 NYCRR 613.3(b)) [Citation Revised March 2008; Revised March 2010].</p> | <p>(NOTE: This requirement is repeated in PO.20.1.NY.)</p> <p>(NOTE: This requirement applies to all petroleum storage facilities with a combined storage capacity over 1100 gal except the following:</p> <ul style="list-style-type: none"> <li>- oil production facilities</li> <li>- facilities licensed under article 12 of the Navigation Law</li> <li>- facilities regulated under the Federal Natural Gas Act.)</li> </ul> <p>Verify that all existing ASTs and USTs at any petroleum storage facilities having a combined capacity of over 1100 gal are registered with the Department, including any out-of -service facility that has not been permanently closed.</p> <p>Verify that, if ownership of the facility changes, the new owner reregisters the facility with the department within 30 days of ownership transfer</p> <p>Verify that registration is renewed every 5 yr from the date of the last valid registration until the Department receives written notice that the AST/UST has been permanently closed or that ownership of the AST/UST has been transferred.</p> <p>Verify that, within 30 days prior to substantially modifying a storage facility, the facility notifies the Department of such modification on forms supplied by the Department.</p> <p>Verify that a registration certificate that is current and valid is displayed on the premises at all times.</p> <p>(NOTE: Any existing facility registered under 612 must comply with the requirements of Part 613, handling and storage of petroleum. Any new facility or modification to an existing facility registered under this Part must comply with the requirements of Part 614, standards for new and substantially modified petroleum storage facilities. Only the portion of the facility being modified must be brought into compliance with Part 614.)</p> <p>(NOTE: See ST.4.4.NY. for transfer requirements.)</p> <p>(NOTE: See applicability notes in ST.4.1.ST.)</p> <p>Verify that all fill ports are permanently marked to identify the product inside the tank with the following colors:</p> <ul style="list-style-type: none"> <li>- high gasoline - red</li> <li>- middle gasoline – blue</li> <li>- lower gasoline - white</li> </ul> |

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| <p><b>ST.4.3.NY.</b> Registered petroleum storage facilities must install specific valves and gauges (6 NYCRR 613.3 (c)(1) through (5) and (d)) [Revised March 2005; Citation Revised March 2008; Revised March 2010].</p> | <ul style="list-style-type: none"> <li>- higher unleaded gasoline - red with white cross</li> <li>- middle unleaded gasoline - blue with white cross</li> <li>- lower unleaded gasoline - white with black cross</li> <li>- vapor recovery - orange</li> <li>- diesel - yellow</li> <li>- #1 fuel oil - purple with yellow bar</li> <li>- #2 fuel oil - green</li> <li>- kerosene - brown.</li> </ul> <p>Verify that the fill ports are marked with the following symbols:</p> <ul style="list-style-type: none"> <li>- circle for gasoline products and vapor recovery lines</li> <li>- hexagon for other distillates</li> <li>- a black border around white symbols and a white border around all other colors are painted around fuel products containing extenders such as alcohol.</li> </ul> <p>Verify that monitoring wells are permanently marked and identified as a monitoring well.</p> <p>(NOTE: These requirements also apply to Used Oil AST/USTs.)</p> <p>(NOTE: See applicability notes in ST.4.1.ST.)</p> <p>Verify that all dispensers of motor fuel under pressure from a remote pumping system are equipped with a shear valve (impact valve) located in the supply line at the inlet of the dispenser.</p> <p>Verify that the shear valve is designed to close automatically in the event the dispenser is accidentally dislodged from the inlet pipe.</p> <p>Verify that all tanks which cause a gravity head on a dispenser of motor fuels is equipped with a device such as a solenoid valve positioned adjacent to and downstream from the operating valve.</p> <p>Verify that the solenoid valve is installed and adjusted so that liquid cannot flow by gravity from the tank in case of piping or dispenser hose failure.</p> <p>Verify that all ASTs are equipped with a gauge accurately showing the level of product in the tank, accessible to the carrier and installed so it can be conveniently read.</p> <p>(NOTE: A high level warning alarm, a high level liquid pump cut-off controller, or equivalent device may be used instead of the gauge.)</p> <p>Verify that the design capacity, working capacity, and identification number of the AST are clearly marked on the tank and at the gauge.</p> <p>Verify that all fill pipes leading to a pump filled tank are equipped with a properly functioning check valve, or equivalent device providing automatic protection</p> |

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| <p><b>ST.4.4.NY.</b> Registered petroleum storage facilities and carriers must take specific steps to prevent spills and discharges when conducting a transfer (6 NYCRR 613.3 (a)) [Added March 2003; Revised March 2005; Citation Revised March 2008; Revised March 2010].</p> <p><b>ST.4.5.NY.</b> Registered petroleum storage facilities must report spills and discharges (6 NYCRR 613.8) [Added March 2003; Citation Revised March 2008; Revised March 2010].</p> <p><b>ST.4.6.NY.</b> Registered petroleum storage facilities located in flood plains must</p> | <p>against backflow, when the piping arrangement of the fill pipe is such that backflow from the receiving tank is possible.</p> <p>Verify that each tank connection through which petroleum can normally flow is equipped with an operating valve to control the flow.</p> <p>Verify that all gauges, valves and other equipment for spill prevention are maintained in good working order at all times.</p> <p>(NOTE: These requirements also apply to Used Oil AST/USTs.)</p> <p>(NOTE: See applicability notes in ST.4.1.ST.)</p> <p>Verify that the operator, when on the premises or when in control of a petroleum transfer, is responsible for transfer activities.</p> <p>Verify that, if the operator is not on the premises or not in control of a petroleum transfer, the carrier is responsible for transfer activities.</p> <p>Verify that the operator or carrier employs practices for preventing transfer spills and accidental discharges.</p> <p>Verify that, prior to the transfer, the operator or carrier determines that the receiving tank has available capacity to receive the volume of petroleum to be transferred.</p> <p>Verify that the operator or carrier monitors every aspect of the delivery and takes immediate action to stop the flow of petroleum when the working capacity of the tank has been reached or should an equipment failure or emergency occur.</p> <p>(NOTE: These requirements also apply to Used Oil AST/USTs.)</p> <p>(NOTE: See applicability notes in ST.4.1.ST.)</p> <p>Verify that any person with knowledge of a spill, leak or discharge of petroleum reports the incident to the Department within 2 hours of discovery.</p> <p>Verify that the results of any inventory record, test or inspection that shows a facility is leaking is reported to the Department within 2 hours of discovery.</p> <p>Verify that notification is made by calling the telephone hotline (518) 457-7362.</p> <p>(NOTE: These requirements also apply to Used Oil AST/USTs.)</p> <p>(NOTE: Moved from PO.20.2.NY., March 2005.)</p> |

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| be safeguarded against buoyancy and lateral movement (6 NYCRR 613.2) [Citation Revised March 2008]. | (NOTE: See applicability notes in ST.4.1.ST.)<br><br>Verify that these facilities are safeguarded against buoyancy and lateral movement by floodwaters in accordance with operating standards set forth in National Fire Protection Agency (NFPA) No. 30, section 2-5.6 and in accordance with state and local flood plain requirements. |  |

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| <b>ST.5.</b><br><br><b>ABOVEGROUND<br/>STORAGE TANKS</b><br><br><b>ST.5.1.NY.</b> [Moved March 2005].<br><br><b>ST.5.2.NY.</b> ASTs at registered petroleum storage facilities must meet inspection requirements (6 NYCRR 613.6) [Revised March 2003; Citation Revised March 2008] | <p>(NOTE: See ST.4.1.NY. for registration requirements for both USTs and ASTs at petroleum storage facilities.)</p> <p>(NOTE: These requirements apply to Used Oil ASTs.)</p> <p>Verify that the ASTs are inspected at least monthly.</p> <p>Verify that the monthly inspection includes the following:</p> <ul style="list-style-type: none"> <li>- inspecting exterior surfaces of tanks, pipes, valves, and other equipment for leaks and maintenance deficiencies</li> <li>- identifying cracks, areas of wear, corrosion and thinning, poor maintenance and operating practices, excessive settlement of structures, separation of swelling of tank insulation, malfunctioning equipment, and structural and foundation weakness</li> <li>- inspecting and monitoring all leak detection systems, cathodic protection monitoring equipment, or other monitoring or warning systems that may be in place at the storage facility.</li> </ul> <p>Verify that any AST which could reasonably be expected to discharge petroleum to waters of the state has a detailed inspection every 10 yr.</p> <p>(NOTE: The following are exempt from the 10-yr inspection requirement:</p> <ul style="list-style-type: none"> <li>- tanks which are entirely aboveground, such as tanks on racks, cradles, or stilts</li> <li>- tanks storing No. 5 or No. 6 fuel oil</li> <li>- tanks installed in conformance with the standards for new construction.)</li> </ul> <p>Verify that the 10-yr inspection consists of a tightness test of the tank and connecting underground pipes or an inspection consisting of the following:</p> <ul style="list-style-type: none"> <li>- cleaning the tank and difficult-to-reach areas within the tank in accordance with generally accepted practices</li> <li>- removal, transportation, and disposal of sludge in a manner consistent with all applicable state and Federal laws</li> <li>- inspecting the tank shell for soundness and testing all welds and seams on the tank bottom for porosity and tightness using a test consistent with generally accepted industry testing and inspection practices</li> <li>- visual inspection of the internal surfaces of the tank and difficult to reach areas for corrosion or failure</li> <li>- inspection of internal coatings for any signs of failure of the coating system</li> </ul> |

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| <p><b>ST.5.3.NY.</b> ASTs at registered petroleum storage facilities must have specific containment (6 NYCRR 613.3 (c )(6)).</p> | <p>such as cracks, bubbles, blisters, peeling, curling, or separation<br/>- a tightness test of any connecting underground pipes.</p> <p>Verify that, if an inspection reveals any of the following conditions, remedial measures are promptly taken to eliminate the leak or deficiency:</p> <ul style="list-style-type: none"> <li>- a leak</li> <li>- a tank or equipment deficiency, or a deficiency in monitoring equipment</li> <li>- excessive thinning of the tank shell which would indicate structural weakness when the tank is filled with petroleum</li> <li>- any other deficiency that could result in failure to function properly or store and contain the product in storage.</li> </ul> <p>Verify that, if any portion of a storage facility is not inspected, the uninspected portion is taken out of service.</p> <p>Verify that the reports of these inspections are maintained and made available to the Department for at least 10 yr.</p> <p>Verify that the reports include the following information:</p> <ul style="list-style-type: none"> <li>- facility registration number</li> <li>- identification number for tank inspected</li> <li>- date of inspection</li> <li>- results of inspection, including a report on the need for repair</li> <li>- certification by the inspector that the inspection was performed in a manner consistent with these requirements</li> <li>- address of the inspector</li> <li>- signature of the inspector.</li> </ul> <p>(NOTE: These requirements apply to Used Oil ASTs.)</p> <p>Determine whether the tanks are ASTs that could reasonably be expected to discharge petroleum to the waters of the State, or have a capacity of 10,000 gal or more.</p> <p>Verify that the storage facilities have secondary containment constructed.</p> <p>Verify that the construction of diking and the storage capacity of the diked area are in accordance with NFPA No. 30, section 2-2.3.3.</p> <p>Verify that, if soil is used for the secondary containment, it is of such character that any spill onto it will be readily recoverable and will result in minimal amount of soil contamination.</p> <p>Verify that stormwater collected within the secondary containment is controlled by a manually operated pump or siphon, or a gravity drain pipe with two manually</p> |

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| <p><b>ST.5.4.NY.</b> Registered petroleum ASTs must follow specific tank closure requirements (6 NYCRR 613.9) [Revised March 2003; Citation Revised March 2008].</p> | <p>controlled dike valves, one on each side of the dike.</p> <p>Verify that all pumps, siphons, and valves are properly maintained and kept in good condition.</p> <p>Verify that if gravity drain pipes are used all dike valves are locked in a closed position, except when the operator is draining clean water from the diked area.</p> <p>Verify that stormwater or any other discharge from the secondary containment is uncontaminated and free of sheen prior to discharge.</p> <p>Verify that contaminated stormwater is treated to reduce the petroleum concentration to 15 ppm or less and to remove any visible sheen prior to discharge.</p> <p>(NOTE: These requirements apply to Used Oil ASTs.)</p> <p>Verify that storage tanks or facilities which are temporarily out of service for 30 or more days are closed as follows:</p> <ul style="list-style-type: none"> <li>- all product is removed from the tank and piping system to the lowest draw-off point</li> <li>- tank is protected from floatation in accordance with good engineering practices</li> <li>- all manways are locked or bolted securely and fill lines, gauge openings, or pump lines are capped or plugged to prevent unauthorized use of tampering.</li> </ul> <p>Verify that storage tanks or facilities temporarily out of service still meet all requirements for registered petroleum storage facilities.</p> <p>Verify that any tank or storage facility which is permanently out of service complies with the following requirements:</p> <ul style="list-style-type: none"> <li>- liquid and sludge are removed from the tank and connecting lines</li> <li>- tank is rendered free of petroleum vapors and provisions made for natural breathing of the tank to ensure it remains vapor free</li> <li>- all connecting lines are disconnected and removed or securely capped or plugged</li> <li>- manways are securely fastened in place</li> <li>- stenciled with the date of permanent closure</li> <li>- protected from floatation in accordance with good engineering practice.</li> </ul> <p>Verify that the Department is notified within 30 days prior to permanent closure of a tank or storage facility.</p> <p>Verify that used tanks are not reinstalled for petroleum storage if they do not meet the standards for new tanks.</p> |

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| <p><b>ST.5.5.NY.</b> ASTs at new registered petroleum storage facilities must meet specific minimum standards (6 NYCRR 614.8 through 614.10) [Revised March 2005; Citation Revised March 2008].</p> | <p>Verify that, if the used tank does meet the standards for new tanks, it is thoroughly cleaned and inspected, internally and externally for structural integrity, pinholes, cracks, structural damage, or excessive corrosion or wear.</p> <p>(NOTE: These requirements apply to Used Oil ASTs.)</p> <p>Verify that the ASTs meet the following requirements:</p> <ul style="list-style-type: none"> <li>- are made of steel</li> <li>- are underlain by impermeable barriers</li> <li>- use a leak monitoring system.</li> </ul> <p>Verify that new ASTs are constructed of steel and meet or exceed one of the following design and manufacturing standards:</p> <ul style="list-style-type: none"> <li>- Underwriters Laboratories No. 58</li> <li>- API Standard No. 650</li> <li>- API Standard No. 620</li> <li>- CAN4-S601-M84</li> <li>- CAN4-S630-M84.</li> </ul> <p>Verify that the bottoms of new tanks which rest on or in the ground are cathodically protected with sacrificial anodes or an impressed current system designed, fabricated, and installed in accordance with recognized engineering practices.</p> <p>Verify that the cathodic protection system is designed to provide a minimum of 30 yr of protection.</p> <p>Verify that a qualified engineer or corrosion specialist supervises the installation of the cathodic protection system when necessary to assure the system has been installed as designed.</p> <p>Verify that each cathodic protection system has a monitor that enables the storage facility to check on the adequacy of cathodic protection.</p> <p>Verify that the exterior surfaces of all new ASTs are protected by a primer coat, a bond coat, and two or more final coats of paint, or have an equivalent surface coating system designed to prevent corrosion and deterioration.</p> <p>Verify that any new stationary AST designed to rest on the ground is constructed with a double bottom or underlain by an impervious barrier such as a concrete pad or a cut-off barrier.</p> |
| <p><b>ST.5.6.NY.</b> New ASTs at registered petroleum storage</p>   | <p>(NOTE: These requirements apply to Used Oil ASTs.)</p>   |



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| <p>facilities must meet specific monitoring requirements (6 NYCRR 614.11) [Revised March 2005; Citation Revised March 2008].</p> <p><b>ST.5.7.NY.</b> Specific standards must be followed when installing ASTs at registered petroleum storage facilities (6 NYCRR 614.13) [Revised March 2005; Citation Revised March 2008].</p> <p><b>ST.5.8.NY.</b> Registered AST petroleum storage facilities must meet specific requirements when repairing ASTs (6 NYCRR 614.12) [Revised March 2003; Citation Revised March 2008].</p> | <p>Verify that all new ASTs have equipment for monitoring between the tank bottom and the impermeable barrier, including, but not limited to, the following which monitor for the presence of petroleum visually, electronically, or by other satisfactory methods:</p> <ul style="list-style-type: none"> <li>- perforated gravity collection pipes</li> <li>- channels in a concrete foundation pad.</li> </ul> <p>(NOTE: These requirements apply to Used Oil ASTs.)</p> <p>Verify that ASTs and appurtenances are installed in a manner consistent with the New York State Uniform Fire Prevention and Building Code and NFPA No. 30.</p> <p>Verify that new ASTs are supported on a well-drained, stable foundation that prevents movement, rolling, or settling of the tank and is designed to minimize corrosion of the tank bottom.</p> <p>Verify that new ASTs, pipes, and distribution equipment is not located along highway curves or otherwise exposed to traffic hazards.</p> <p>Verify that, before being placed in service, all new ASTs are tested for tightness and inspected in accordance with requirements outlined in API Standard No. 650.</p> <p>Verify that, if a pneumatic test is used, all fittings, welds, and joints are coated with a soap solution and inspected for air leaks.</p> <p>Verify that a building permit has been acquired prior to beginning installation and 24-h notice is given to the local building or fire code enforcement official.</p> <p>(NOTE: These requirements apply to Used Oil ASTs.)</p> <p>Verify that all repairs are permanent in nature and equal to or better than the standards of original construction.</p> <p>Verify that repairs consist of one of the following</p> <ul style="list-style-type: none"> <li>- steel welds or steel patches which are welded in place in accordance with accepted practices</li> <li>- practices set forth for reconditioning of USTs.</li> </ul> <p>Verify that all welds associated with the repair of a tank are inspected and tested for tightness before the tank is returned to service.</p> <p>Verify that, prior to repair, the tank is cleaned in accordance with generally accepted practices and sludge accumulated in the bottom of the tank is removed, transported, and disposed of in a manner consistent with applicable state and</p> |

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|   | Federal requirements.                        |

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| <p><b>ST.15.</b></p> <p><b>EMISSIONS/<br/>DISCHARGES FROM POL<br/>STORAGE VESSELS</b></p> <p><b>ST.15.1.NY.</b> Gasoline dispensing sites must be equipped with vapor control equipment (6 NYCRR 230.2(a) through (e)).</p> | <p>(NOTE: This checklist item moved here from AE.55.1.NY.; January 1999.)</p> <p>Verify that all storage tanks at gasoline dispensing sites with an annual throughput exceeding 120,000 gal are equipped with both of the following:</p> <ul style="list-style-type: none"> <li>- a stage I vapor collection system consisting of a vapor-tight return line from the storage tank, or its vent, to the gasoline transport vehicle</li> <li>- a properly installed onsite vapor control system connected to a vapor collection system, or an equivalent control system.</li> </ul> <p>(NOTE: A stage I vapor collection system will not be required until 1 May 1999 for storage tanks that meet all of the following:</p> <ul style="list-style-type: none"> <li>- are located at gasoline dispensing sites in the counties of New York, Bronx, Queens, or Richmond</li> <li>- have a capacity less than 2000 gal</li> <li>- were installed prior to 1 January 1970.)</li> </ul> <p>Verify that all stationary gasoline storage tanks with a capacity of 250 gal or more located in the New York City metropolitan area are equipped with stage I vapor collection or control systems regardless of annual throughput.</p> <p>(NOTE: Gasoline tanks with a capacity less than 550 gal used exclusively for farm tractors that are used for agricultural purposes or for snow plowing are exempt; however, these tanks must be equipped for submerged filling.)</p> <p>Verify that gasoline dispensing sites located in Lower Orange Country or the New York City metropolitan area whose annual throughput exceeds 120,000 gal are equipped with a stage II vapor collection system that has been approved by the Department.</p> <p>(NOTE: A stage II vapor collection system will not be required until 1 May 1999 for gasoline dispensing sites which were installed prior to 1 January 1970 in the counties of New York, Bronx, Kings, Queens, or Richmond.)</p> <p>(NOTE: Approval of a stage II vapor collection system is based on a determination that a properly installed and operated system will remove at least 90 percent by weight of the gasoline vapors that are displaced or drawn from a vehicle fuel tank during refueling to a vapor-tight holding system or vapor control system.)</p> <p>Verify that gasoline dispensing sites located in the Lower Orange County</p> |

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| <p><b>ST.15.2.NY.</b> Stationary storage tanks at gasoline dispensing sites must meet equipment requirements (6 NYCRR 230.2(e)) [Revised January 1998].</p>   | <p>metropolitan area that were constructed or substantially modified after 15 October 1994, or located in the New York City metropolitan area which were constructed or substantially modified after 27 June 1987, have a stage I and a stage II vapor collection system, regardless of the annual throughput of gasoline.</p> <p>(NOTE: Gasoline tanks with a capacity less than 550 gal used exclusively for farm tractors that are used for agricultural purposes or for snow plowing are exempt; however, these tanks must be equipped for submerged filling.)</p> <p>Verify that stationary storage tanks at gasoline dispensing sites located in Nassau, Suffolk, Rockland, or Westchester Counties whose annual throughput does not exceed 120,000 gal are equipped for submerged filling.</p> <p>(NOTE: This checklist item moved here from AE.55.2.NY.; January 1999.)</p> <p>Verify that the following stationary storage tanks at gasoline dispensing sites are equipped for submerged filling:</p> <ul style="list-style-type: none"> <li>- those located in Nassau, Suffolk, Rockland, or Westchester Counties that were installed before 2 January 1979 and have an annual throughput that does not exceed 120,000 gal</li> <li>- those located in the Lower Orange County metropolitan area prior that were installed prior to 16 October 1994 and have an annual input that does not exceed 120,000 gal</li> <li>- those located in the New York City metropolitan area, that were installed before 1 January 1979, with a capacity less than 550 gal, that are used exclusively for farm tractors which are used for agricultural purposes or for snow plowing</li> <li>- those located in located in the Lower Orange County metropolitan area, that were installed before 15 October 1994, with a capacity less than 550 gal, used exclusively for farm tractors which are used for agricultural purposes or snow plowing.</li> </ul> |
| <p><b>ST.15.3.NY.</b> Gasoline transport vehicles and gasoline dispensing sites must meet general requirements for vapor collection systems (6 NYCRR 230.2(f)(1) through 230.2(f)(3)) [Revised January 1998].</p> | <p>(NOTE: This checklist item moved here from AE.55.3.NY.; January 1999.)</p> <p>Verify that gasoline transport vehicles and gasoline dispensing sites meet the following general requirements for Stage I and Stage II vapor collection systems:</p> <ul style="list-style-type: none"> <li>- the system is installed and modified as necessary</li> <li>- adequate training and written instructions are provided to the operator</li> <li>- worn or ineffective component or design elements are replaced, repaired, or modified to ensure the vapor-tight integrity and efficiency of the vapor collection and control system.</li> </ul>  |

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| <b>ST.15.4.NY.</b> Gasoline transport vehicles and gasoline dispensing sites must meet vapor collection system connection requirements (6 NYCRR 230.2(f)(4) through 230.2(f)(6)) [Revised January 1998; Citation Revised March 2008]. | <p>(NOTE: This checklist item moved here from AE.55.4.NY.; January 1999.)</p> <p>Verify that gasoline transport vehicles and gasoline dispensing sites meet the following connection requirements for Stage I vapor collection systems:</p> <ul style="list-style-type: none"> <li>- the system is connected and proper operation is ensured when gasoline is loaded, unloaded, or dispensed</li> <li>- the vapor collection hose is connected to the gasoline transport vehicle before the gasoline delivery hose</li> <li>- the gasoline delivery hose is disconnected before the vapor collection hose.</li> </ul> <p>Verify that gasoline transport vehicles and gasoline dispensing sites with stage II vapor collection systems conspicuously post operating instructions for the system in the dispensing area which include the following information:</p> <ul style="list-style-type: none"> <li>- a clear description of how to correctly dispense gasoline with the vapor recovery nozzles utilized at the site</li> <li>- a warning that continued attempts at dispensing gasoline after the system indicates that the vehicle tank is full may result in spillage or recirculation of gasoline</li> <li>- a telephone number established by the Department for use by the public to report problems experienced with the system.</li> </ul> |
| <b>ST.15.5.NY.</b> Gasoline transport vehicles and gasoline dispensing sites must meet specific requirements for stage II vapor collection systems (6 NYCRR 230.2(g), 230.2(h), and 230.2(j)) [Added January 1998].                   | <p>(NOTE: This checklist item moved here from AE.55.5.NY.; January 1999.)</p> <p>Verify that dispensers with defective stage II components are removed from service, locked and sealed to prevent vapor loss.</p> <p>Verify that there is no modification, removal, replacement, or addition of any element that would render the stage II vapor collection system inoperative or impair its integrity.</p> <p>Verify that the facility performs daily visual inspections of components of stage II systems to ensure the integrity and efficiency of the system.</p> <p>Verify that accumulations of liquids that block stage II vapor return lines are prevented.</p> <p>Verify that stage II vapor return line condensate traps are accessible and emptied periodically to prevent blockage.</p>  |
| <b>ST.15.6.NY.</b> Stage II systems must be tested (6 NYCRR 230.2(k)).  | <p>(NOTE: This checklist item moved here from AE.55.6.NY.; January 1999.)</p> <p>Verify stage II systems are tested for backpressure, liquid blockage, and leakage in accordance with the following schedule:</p>  |

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| <p><b>ST.15.7.NY.</b> Gasoline transport vehicles must meet specific testing requirements (6 NYCRR 230.4(a), (b) and (d)).</p>   | <ul style="list-style-type: none"> <li>- for systems installed or modified after 20 July 1994, before operation commences</li> <li>- for all systems, at 5 yr intervals.</li> </ul> <p>(NOTE: This checklist item moved here from AE.55.7.NY.; January 1999.)</p> <p>Verify that gasoline transport vehicles are not filled or emptied unless it meets the following requirements:</p> <ul style="list-style-type: none"> <li>- can sustain a pressure change of not more than 3 in of water (6 mm Hg) in 5 min when pressurized to a gauge pressure of 18 in of water (34 mm Hg) and evacuated to a gauge pressure of 6 in of water (11 mm Hg)</li> <li>- is repaired within 15 days if it ever fails to meet the pressure change standard above</li> <li>- displays a marking near the U.S. Department of Transportation (DOT) certificate plate, in letters and numerals at least 2 in. high, which reads NYS DEC (New York State Department of Environmental Conservation) and the date on which the vehicle was last tested.</li> </ul> <p>Verify that gasoline transport vehicles are tested annually.</p> <p>(NOTE: At the discretion of the Commissioner, testing and marking of vehicles may be satisfied if the vehicle undergoes equivalent certification in another state.)</p> |
| <p><b>ST.15.8.NY.</b> Gasoline transport vehicles are required to meet specific operational requirements during loading and unloading (6 NYCRR 230.4(e), (f) and (g)).</p> | <p>(NOTE: This checklist item moved here from AE.55.8.NY.; January 1999.)</p> <p>Verify that the following requirements are met during the loading or unloading of gasoline transport vehicles:</p> <ul style="list-style-type: none"> <li>- leakage from any component of the gasoline transport vehicle or the vapor collection or control systems does not equal or exceed 100 percent of the lower explosive limit (LEL measured as propane) when measured at a distance of 1 in. with a combustible gas detector</li> <li>- avoidable visible liquid leaks from such components are not allowed</li> <li>- no vehicle is loaded under a pressure exceeding 18 in. of water (34 mm Hg) gauge, or unloaded under a vacuum exceeding 6 in. of water (11 mm Hg) gauge</li> <li>- dome covers on gasoline transport vehicles are closed while the vehicle is loaded, unloaded, or in motion, except when the vehicle is hatch loaded.</li> </ul> <p>(NOTE: Components of the transport vehicle or vapor collection or control systems include all piping, seals, hoses, connections, pressure-vacuum seals, and other possible leak sources.)</p>   |

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| <b>ST.15.9.NY.</b> Gasoline dispensing sites located in the New York City metropolitan area must meet recordkeeping requirements (6 NYCRR 230.5(a), (c) and (d)). | <p>(NOTE: This checklist item moved here from AE.55.9.NY.; January 1999.)</p> <p>Verify that a record of the quantity of all gasoline delivered to the gasoline dispensing site is maintained for at least 2 yr.</p> <p>Verify that a copy of the gasoline dispensing site's registration form is conspicuously posted in a location accessible for inspection during all operational hours.</p> <p>Verify that the results of stage II systems at gasoline dispensing sites are both:</p> <ul style="list-style-type: none"> <li>- submitted to the Department within 30 days of the test</li> <li>- maintained for 5 yr.</li> </ul>   |
| <b>ST.15.10.NY.</b> Gasoline transport vehicles must meet recordkeeping requirements (6 NYCRR 230.6).   | <p>(NOTE: This checklist item moved here from AE.55.10.NY.; January 1999.)</p> <p>Verify that a record is maintained of pressure-vacuum testing and repairs for gasoline transport vehicles, which include the following information:</p> <ul style="list-style-type: none"> <li>- identity of the gasoline transport vehicle</li> <li>- results of the testing</li> <li>- date that the testing and repairs, as needed, were done</li> <li>- the nature of the needed repairs</li> <li>- date of retests, where applicable.</li> </ul> <p>Verify that results of the most recent pressure-vacuum test are kept with the gasoline transport vehicle.</p> <p>Verify that the records are kept for at least 2 yr.</p> |

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| <b>ST.30.</b><br><br><b>UST STATE-SPECIFIC</b><br><br><b>ST.30.1.NY.</b> [Deleted March 2005]. | <br><br><br><br><br><br><br><br><br><br>(NOTE: See ST.4.1.NY. for registration requirements for both USTs and ASTs at petroleum storage facilities.) |



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| <p><b>ST.35.</b></p> <p><b>NEW OR UPGRADED USTs</b></p> <p><b>ST.35.1.NY.</b> New USTs at registered petroleum storage facilities must meet specific minimum standards (6 NYCRR 614.2 and 614.3) [Revised March 2003; Revised March 2005; Citation Revised March 2008].</p> <p><b>ST.35.2.NY.</b> Cathodically protected new steel USTs at registered petroleum storage facilities must meet specific design and installation requirements (6 NYCRR 614.3(e)) [Revised March 2005; Citation Revised March</p> | <p>(NOTE: These requirements apply to Used Oil USTs.)</p> <p>Verify that the USTs are made of fiberglass reinforced plastic, steel that is cathodically protected, or steel which is clad with fiberglass.</p> <p>Verify that the USTs have secondary containment and leak monitoring systems.</p> <p>Verify that underground pipes are made of fiberglass reinforced plastic or cathodically protected iron or steel.</p> <p>Verify that all new underground tanks used in New York State bear a permanent stencil, label or plate which contains the following information:</p> <ul style="list-style-type: none"> <li>- manufacturer's statement that, "This tank conforms with 6 NYCRR Part 614"</li> <li>- the standard of design by which the tank was manufactured</li> <li>- the petroleum products and percentages of volume of petroleum additives which may be stored permanently and compatibly within the tank or reference to a list available from the manufacturer which identifies products compatible with all tank materials</li> <li>- the year in which the tank was manufactured</li> <li>- a unique identification number</li> <li>- the dimensions, design and working capacity and model number of tank</li> <li>- the name of manufacturer.</li> </ul> <p>Verify that a second label that shows all the information required above and that also shows the date of installation is conspicuously displayed and permanently affixed to the fill port.</p> <p>Verify that the second label is readily visible to the carrier.</p> <p>(NOTE: The second label may be imbedded in concrete, welded to the fill port, or otherwise permanently affixed.)</p> <p>(NOTE: These requirements apply to Used Oil USTs.)</p> <p>Verify that these USTs are protected with sacrificial anodes or an impressed current system designed, fabricated, and installed in accordance with one of the following standards:</p> <ul style="list-style-type: none"> <li>- American Petroleum Institute Publications No. 1632</li> <li>- Underwriters Laboratories of Canada ULC-S603.1</li> </ul> |

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| <p>2008].</p> <p><b>ST.35.3.NY.</b> New USTs at registered petroleum storage facilities must have secondary containment (6 NYCRR 614.4) [Revised March 2005; Citation Revised March 2008].</p> | <ul style="list-style-type: none"> <li>- Steel Tank Institute Standard No. sti-P(3)</li> <li>- National Association of Corrosion Engineers Standard RP-01-69.</li> </ul> <p>Verify that a qualified engineer or corrosion specialist supervises the installation of the cathodic protection system when this is necessary to assure the system has been installed as designed.</p> <p>Verify that each cathodic protection system has a monitor that enables the storage facility to check on the adequacy of the protection.</p> <p>(NOTE: These requirements apply to Used Oil USTs.)</p> <p>Verify that the secondary containment system consists of one of the following:</p> <ul style="list-style-type: none"> <li>- a double-walled tank</li> <li>- a vault</li> <li>- cut-off walls</li> <li>- an impervious underlayer.</li> </ul> <p>Verify that double-walled tanks are designed and manufactured in accordance with all of the following standards:</p> <ul style="list-style-type: none"> <li>- the interstitial space can be monitored for tightness</li> <li>- outer jackets made of steel have a minimum thickness of 10-gauge and are coated with fiberglass reinforced plastic</li> <li>- there are no penetrations of any kind through the jacket to the tank, except top entry manholes and fittings required for filling the tank, venting the tank, or monitoring the interstitial space</li> <li>- the outer jacket covers at least the bottom 80 percent of the tank</li> <li>- the jacket is designed to contain an inert gas or liquid at a pressure greater than the maximum internal pressure or able to contain a vacuum for 1 mo.</li> </ul> <p>Verify that, if a vault is used for secondary containment, it meets the following standards:</p> <ul style="list-style-type: none"> <li>- is water tight</li> <li>- is impervious to leakage of petroleum</li> <li>- able to withstand chemical deterioration and structural stresses from internal and external causes</li> <li>- is a continuous structure with a chemical resistant water stop used at any joint</li> <li>- has no drain connections or other entries, except for top entry manholes and other top openings for filling and emptying the tank, venting, and for monitoring and pumping of petroleum which may leak into the vault</li> <li>- tank or tanks within the vault are encased or bedded in a manner consistent with acceptable engineering practices.</li> </ul> |

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| <p><b>ST.35.4.NY.</b> New USTs at registered petroleum storage facilities must have a leak monitoring system (6 NYCRR 614.5) [Revised March 2005; Citation Revised March 2008].</p> | <p>Verify that cut-off walls are used only when groundwater levels are above the bottom of the tank excavation.</p> <p>Verify that cut-off walls meet the following standards:</p> <ul style="list-style-type: none"> <li>- consists of an impermeable barrier with a permeability rate to water equal to or less than <math>1 \times 10^{-6}</math> cm/s</li> <li>- does not deteriorate in an underground environment and in the presence of petroleum</li> <li>- extends around the perimeter of the excavation and to an elevation below the lowest groundwater level</li> <li>- if a synthetic membrane is used, any seams, punctures, or tears are repaired and made leak tight prior to backfilling</li> <li>- if impervious native soil is used, it is continuous, of sufficient depth, thickness and extent to contain a leak, and has a permeability rate to water equal to or less than <math>1 \times 10^{-6}</math> cm/s.</li> </ul> <p>Verify that an impervious underlayer is used only when groundwater levels are below the bottom of the excavation and where soils are well drained.</p> <p>Verify that the impervious underlayer meets the following standards:</p> <ul style="list-style-type: none"> <li>- has a permeability rate to water equal to or less than <math>1 \times 10^{-6}</math> cm/s</li> <li>- does not deteriorate in an underground environment and in the presence of petroleum</li> <li>- consists of impervious native soils, an impervious concrete pad, synthetic membrane, or any equivalent material</li> <li>- extends at least 1 ft beyond the sides and ends of the tank</li> <li>- has a slope to the sump of at least 1/4 in./ft</li> <li>- an observation well is positioned in the sump and extends to the surface of the excavation for sampling for leakage and pumping out water or product which may accumulate</li> <li>- surface waters are drained from the site using good engineering practices.</li> </ul> <p>(NOTE: These requirements apply to Used Oil USTs.)</p> <p>Verify that the tanks have one of the following systems:</p> <ul style="list-style-type: none"> <li>- double-walled tank with monitoring of the interstitial (annular) space</li> <li>- in-tank monitoring system</li> <li>- observation well or wells.</li> </ul> <p>Verify that, if a double-walled tank is used, the interstitial space is monitored for tightness using pressure monitoring, vacuum monitoring, electronic monitoring, manual sampling, or an equivalent method once a week.</p> <p>Verify that, if in-tank monitoring is used, it consists of in-tank equipment providing continuous monitoring of any leakage from the tank of 0.2 gal/h or</p> |

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| <p><b>ST.35.5.NY.</b> New USTs at registered petroleum storage facilities must meet installation requirements (6 NYCRR 614.7) [Revised March 2005; Citation Revised March 2008].</p> <p><b>ST.35.6.NY.</b> Steel USTs at registered petroleum storage facilities may be reconditioned (6 NYCRR 614.6) [Revised March 2005; Citation Revised March 2008].</p> | <p>larger.</p> <p>Verify that, if an observation well or series of wells is used, they meet the following standards:</p> <ul style="list-style-type: none"> <li>- consist of slotted or screened wells at least 4 in. in diameter</li> <li>- are installed down-gradient in the groundwater or at a sump within the secondary containment system and to an elevation of at least 24 in. below the bottom of the tank</li> <li>- installed within the backfill surrounding the tank</li> <li>- are monitored for traces of petroleum at least once a week</li> <li>- are protected from damage if located in a traffic area</li> <li>- are sealed or capped so as to preclude liquid from entering the well from the surface</li> <li>- clearly marked as monitoring wells to prevent accidental delivery of product.</li> </ul> <p>(NOTE: These requirements apply to Used Oil USTs.)</p> <p>Verify that the USTs are installed according to the New York State Uniform Fire Prevention and Building Code and National Fire Protection Association Publication No. 30.</p> <p>Verify that any facility installing a new UST or substantially modifying one applies for a building permit and gives at least 24 h notice to the local building or fire code enforcement official prior to beginning excavation, testing for tightness, and backfilling.</p> <p>Verify that accurate drawing or as-built plans showing the size and location of any new UST and piping system are maintained.</p> <p>(NOTE: New York UST requirements also apply to Used Oil USTs.)</p> <p>(NOTE: An underground steel tank may be reconditioned by installing an interior coating (lining) under the direction of the lining manufacturer or a certified representative.)</p> <p>Verify that the manufacturer or representative guarantees to the owner in writing that the coating will not fail, crack, separate or deteriorate and the tank will not leak the product specified in storage for a period of 10 years.</p> <p>Verify that a copy of the guarantee is kept by the owner for the life of the tank.</p> |

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| <p><b>ST.65.</b></p> <p><b>RELEASE DETECTION FOR USTs</b></p> <p><b>ST.65.1.NY.</b> Registered petroleum storage facilities USTs must meet specific inventory monitoring requirements (6 NYCRR 613.4(a), (b), and (c)) [Revised March 2005; Citation Revised March 2008].</p> <p><b>ST.65.2.NY.</b> Registered petroleum storage facilities with USTs must investigate and report inventory losses (6 NYCRR 613.4(d)) [Citation Revised March 2008].</p> | <p>(NOTE: This requirement applies to all petroleum storage facilities with a combined storage capacity over 1100 gal except the following:</p> <ul style="list-style-type: none"> <li>- oil production facilities</li> <li>- facilities licensed under article 12 of the Navigation Law</li> <li>- facilities regulated under the Federal Natural Gas Act.)</li> </ul> <p>(NOTE: No inventory monitoring is required for either:</p> <ul style="list-style-type: none"> <li>- a UST storing No. 5 or No. 6 fuel oil</li> <li>- when the operator can demonstrate to the satisfaction of the Department that it is technically impossible to perform inventory monitoring for leak detection.)</li> </ul> <p>Verify that the operator of the UST keeps daily inventory records for detecting leaks.</p> <p>Verify that records are kept for each tank (or battery of tanks if they are interconnected) and include measurements of bottom water levels, sales, use, deliveries, inventory on hand, and losses or gains.</p> <p>Verify that reconciliation of records is kept current, account for all variables, and are in accordance with generally accepted practices.</p> <p>(NOTE: If the tank is unmetered or contains petroleum for consumptive use on the premises where stored, an alternative method may be used.)</p> <p>Verify that inventory-monitoring records are maintained and made available for Department inspection for at least 5 yr.</p> <p>(NOTE: See applicability note in ST.65.1.NY.)</p> <p>(NOTE: New York UST requirements also apply to Used Oil USTs.)</p> <p>Verify that, if inventory monitoring shows any of the following, an investigation is initiated:</p> <ul style="list-style-type: none"> <li>- an inventory loss</li> <li>- a recurring accumulation of water in the bottom of the tank during any 10-day period</li> <li>- apparent product losses or gains exceed 35 of 1 percent of the tank volume</li> <li>- apparent losses or gains exceeding 7.5 gal/1000 gal delivered.</li> </ul> |

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| <p><b>ST.65.3.NY.</b> Registered petroleum storage facilities with USTs must conduct periodic tightness testing (6 NYCRR 613.5(a)(1) through (3) and (5)) [Citation Revised March 2008].</p> | <p>Verify that, if within 48 h the causes cannot be explained by inaccurate recordkeeping, temperature variations, or other factors not related to leakage, the nearest regional office of the Department is notified and the tank taken out of service until the cause is determined and necessary repairs or replacements made.</p> <p>(NOTE: See applicability note in ST.65.1.NY.)</p> <p>(NOTE: New York UST requirements also apply to Used Oil USTs.)</p> <p>Verify that Category A unprotected tanks and connecting piping are periodically tested for tightness according to the following schedule:</p> <ul style="list-style-type: none"> <li>-initial test when tank is 10 yr old</li> <li>-retest every 5 yr thereafter until permanently closed.</li> </ul> <p>Verify that Category B tank corrosion resistant tanks and connecting piping are periodically tested for tightness according to the following schedule:</p> <ul style="list-style-type: none"> <li>-initial test when tank is 15 yr old</li> <li>-retest every 5 yr thereafter until permanently closed.</li> </ul> <p>(NOTE: The following require no periodic testing:</p> <ul style="list-style-type: none"> <li>- tank and piping system storing No. 5 or No. 6 fuel oil</li> <li>- tank and piping system with a capacity of 1100 gal or less</li> <li>- tanks and piping systems that are corrosion resistant and have a leak monitoring system</li> <li>- on tanks and piping systems installed in conformance with the standards for new construction</li> <li>- when the size of the tank exceeds 50,000 gal or when it is technically impossible to perform a meaningful tightness test.)</li> </ul> <p>Verify that all tightness tests are performed by a technician who meets the following criteria:</p> <ul style="list-style-type: none"> <li>- has an understanding of variables which affect the test</li> <li>- is trained in the performance of the test</li> <li>- meets the qualifications set by the Department.</li> </ul> <p>Verify that any part of the storage facility that is not tight is promptly emptied, replaced, repaired, or taken out of service.</p> |
| <p><b>ST.65.4.NY.</b> Reports of tightness tests for registered petroleum facilities must be sent to the Department (6 NYCRR 613.5(a)(4))</p>  | <p>(NOTE: See applicability note in ST.65.1.NY.)</p> <p>(NOTE: New York UST requirements also apply to Used Oil USTs.)</p> <p>Verify that a report of the test is sent to the Department no later than 30 days after</p>  |

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| <p>[Revised March 2005; Citation Revised March 2008].</p> <p><b>ST.65.5.NY.</b> Exempt corrosion-resistant USTs and pipes at registered petroleum storage facilities must be monitored (6 NYCRR 613.5(b)) [Citation Revised March 2008].</p> | <p>performance of the test.</p> <p>Verify that a test or inspection showing the UST is leaking is reported within 2 h of discovery of the leak using the telephone hotline (518/457-7362).</p> <p>Verify that all test reports include the following information:</p> <ul style="list-style-type: none"> <li>- facility registration number</li> <li>- identification number</li> <li>- date of test</li> <li>- results of test</li> <li>- test method</li> <li>- certification by the technician that the test complies with criteria for a tightness test</li> <li>- statement of technician's qualifications</li> <li>- address of technician</li> <li>- signature of technician.</li> </ul> <p>Verify that a copy of the test report is maintained by the owner of the storage facility for at least 5 yr.</p> <p>(NOTE: See applicability note in ST.65.1.NY.)</p> <p>(NOTE: New York UST requirements also apply to Used Oil USTs.)</p> <p>Verify that the cathodic protection and leak detection systems on these USTs and pipes that are exempt from periodic testing are monitored at least annually.</p> <p>Verify that, if at any time the system fails to provide the necessary electrical current to prevent corrosion, the cathodic protection system is restored within 30 days.</p> <p>Verify that any tank or pipe with a nonworking cathodic protection system is tested for tightness within 1 yr and retested every 5 yr thereafter until the tank is permanently closed.</p> <p>(NOTE: Tanks or pipes with nonworking cathodic protection systems are considered unprotected.)</p> <p>Verify that the storage facility monitors for traces of petroleum at least once a week and all monitoring systems are inspected monthly.</p> <p>Verify that all monitoring systems are kept in proper working order, and, if at any time it fails to function properly, the system is repaired within 30 days.</p> <p>Verify that any tank or piping system with a nonworking monitoring system is tested for tightness within 1 yr and retested every 5 yr thereafter until the tank is</p> |  |

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|   | <p>permanently closed.</p> <p>Verify that monitoring records for cathodic protection and leak detection systems are maintained on the premises for at least 1 yr.</p> |



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| <p><b>ST.95.</b></p> <p><b>CHANGES IN SERVICE<br/>OR CLOSURE OF USTs</b></p> <p><b>ST.95.1.NY.</b> Registered petroleum USTs or facilities must follow specific tank closure requirements (6 NYCRR 613.9) [Revised March 2003; Citation Revised March 2008].</p> | <p>(NOTE: New York UST requirements also apply to Used Oil USTs.)</p> <p>Verify that storage tanks or facilities which are temporarily out of service for 30 or more days are closed as follows:</p> <ul style="list-style-type: none"> <li>- all product is removed from the tank and piping system to the lowest draw-off point</li> <li>- tank is protected from floatation in accordance with good engineering practices</li> <li>- all manways are locked or bolted securely and fill lines, gauge openings, or pump lines are capped or plugged to prevent unauthorized use of tampering.</li> </ul> <p>Verify that storage tanks or facilities temporarily out of service still meet all requirements for registered petroleum storage facilities.</p> <p>Verify that any tank or storage facility which is permanently out of service complies with the following requirements:</p> <ul style="list-style-type: none"> <li>- liquid and sludge are removed from the tank and connecting lines</li> <li>- tank is rendered free of petroleum vapors and provisions made for natural breathing of the tank to ensure it remains vapor free</li> <li>- all connecting lines are disconnected and removed or securely capped or plugged</li> <li>- manways are securely fastened in place</li> <li>- either filled to capacity with a solid inert material (such as sand or concrete slurry) or removed (if an inert material is used, all voids within the tank are filled).</li> </ul> <p>Verify that the Department is notified within 30 days prior to permanent closure of a tank or storage facility.</p> <p>Verify that used tanks are not reinstalled for petroleum storage if they do not meet the standards for new tanks.</p> <p>Verify that, if the used tank does meet the standards for new tanks, it is thoroughly cleaned and inspected, internally and externally for structural integrity, pinholes, cracks, structural damage, or excessive corrosion or wear.</p> |

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| <p><b>HAZARDOUS WASTE<br/>STORAGE TANKS</b></p> <p><b>ST.100.<br/>Small Quantity Generators<br/>(SQG)</b></p> <p><b>ST.100.1.NY.</b> SQGs who accumulate more than 185 gal of liquid hazardous waste or any liquid hazardous waste in a UST in specific counties or over specific aquifers must meet specific requirements (6 NYCRR 373-1.1 (d)(1)(iv)([g])).</p> | <p>(NOTE: These requirements apply to storage in containers or tanks of liquid hazardous waste that is generated onsite in the Counties of Kings, Nassau, Queens, and Suffolk, or over the Schenectady/Niskayuna Aquifer System in Schenectady, Saratoga, and Albany Counties or the Clinton Street--Ball Park Valley Aquifer System in Broome and Tioga Counties.)</p> <p>(NOTE: Recyclable materials and characteristic hazardous wastes stored prior to recycling are excluded from these limitations.)</p> <p>Verify that, for tanks storing any amount of liquid hazardous waste, the secondary containment system is designed and constructed in accordance with the requirements for hazardous waste storage tanks.</p> <p>Verify that the storage of hazardous waste complies with the requirements of subparagraphs 372.2(a)(8)(iii) through (v) (i.e. equivalent of Federal requirements for 180-day accumulation time limit (270-days if transportation is required of over 200 mi) emergency coordinator, and emergency information posted by the phone).</p> <p>(NOTE: By 22 December 1998, existing tank units, not subject to secondary containment requirements prior to the effective date of these regulations [17 December 1995], must be in compliance with these requirements.)</p> |

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| <p><b>HAZARDOUS WASTE<br/>STORAGE TANKS</b></p> <p><b>ST.105.<br/>Generators</b></p> <p><b>ST.105.1.NY.</b> Hazardous waste may be stored tanks for a period not exceeding 90 days without a permit or interim status when specific requirements are met (6 NYCRR 373-1.1(d)(1)(iii)) [Added January 1998].</p> <p><b>ST.105.2.NY.</b> Liquid hazardous waste may be stored in tanks in specific counties or over specific aquifers for a period of 90 days or less without a permit or interim status when specific requirements are met (6 NYCRR 373-1.1(d)(1)(iv) ([a]) through ([f])) [Added January 1998].</p> | <p>(NOTE: The storage of liquid hazardous wastes in the Counties of Kings, Nassau, Queens, and Suffolk, or over the Schenectady/Niskayuna Aquifer System in Schenectady, Saratoga, and Albany Counties and the Clinton Street-Ball Park Valley Aquifer System in Broome and Tioga Counties must meet more stringent management requirements.)</p> <p>Verify that, for storage of liquid hazardous waste, the total amount of hazardous waste stored in containers in the storage areas at one time is 8800 gal or less.</p> <p>(NOTE: Waste stored in areas listed in the above note, waste treated onsite in the same tanks and characteristic hazardous wastes stored prior to recycling are excluded from the 8800 gal limitation.)</p> <p>Verify that the requirements for tanks (these are all the equivalent of the Federal requirements, Section 373-3.10, except for section 373-3.10(h)(3) and (k)) are met.</p> <p>Verify that a label or sign stating HAZARDOUS WASTE identifies all areas and tanks used to accumulate hazardous waste.</p> <p>Verify that all tanks are marked with other words to identify their contents.</p> <p>Verify that the generator complies with the requirements for personnel training in section 373-3.2, for preparedness and prevention in section 373-3.3, and contingency plans and emergency procedures in sections 373- 3.4 and 376.1(g)(1)(iv) (these are all the equivalent of the Federal requirements).</p> <p>(NOTE: These requirements apply to storage in containers or tanks of liquid hazardous waste that is generated onsite in the Counties of Kings, Nassau, Queens, and Suffolk, or over the Schenectady/Niskayuna Aquifer System in Schenectady, Saratoga, and Albany Counties or the Clinton Street--Ball Park Valley Aquifer System in Broome and Tioga Counties.)</p> <p>Verify that a written notification is sent to the appropriate Regional Office stating that it qualifies for this exemption.</p> <p>Verify that the closure plan requirements (Section 373-3.7(a) - (f)) are met.</p> <p>Verify that, for tanks, the secondary containment system is designed and constructed in accordance with the requirements for hazardous waste storage</p> |

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|   | tanks.                                       |

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| <p><b>HAZARDOUS WASTE<br/>STORAGE TANKS</b></p> <p><b>ST.110.<br/>TSD Facilities</b></p> <p><b>ST.110.1.NY.</b> Hazardous waste storage tank systems must meet inspection requirements (6 NYCRR 373-2.10(b)) [Citation Revised March 2008].</p> | <p>Verify that the facility inspects the tank system's integrity according to the following:</p> <ul style="list-style-type: none"> <li>- for each existing tank system, determine that the tank system is not leaking or is unfit for use</li> <li>- assess that the tank system is adequately designed and has sufficient structural strength and compatibility with the wastes to be stored or treated, to ensure that it will not collapse, rupture, or fail.</li> </ul> <p>Verify that, at a minimum, the assessment of the tank system considers the following:</p> <ul style="list-style-type: none"> <li>- design standards, if available, for the tanks and ancillary equipment</li> <li>- hazardous characteristics of the wastes that have been and will be handled</li> <li>- existing corrosion protection measures</li> <li>- documented age of the tank system, if available (otherwise an estimate of the age)</li> <li>- results of a leak test, internal inspection, or other tank integrity examination.</li> </ul> <p>Verify that if, as a result of the assessment conducted, a tank system is found to be leaking or unfit for use, the facility complies with response measures.</p> <p>Verify that the facility meets the following inspection requirements:</p> <ul style="list-style-type: none"> <li>- develop and follow a schedule and procedure for inspecting overfill controls</li> <li>- inspect the following at least once each operating day: <ul style="list-style-type: none"> <li>- aboveground portion of the tank system, if any, to detect corrosion or releases of waste</li> <li>- data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design</li> <li>- the construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste.</li> </ul> </li> </ul> <p>Verify that cathodic protection systems, if present, are inspected according to the following schedule to ensure that they are functioning properly:</p> <ul style="list-style-type: none"> <li>- the proper operation of the cathodic protection system is confirmed within 6 mo after initial installation and annually thereafter</li> <li>- all sources of impressed current is inspected and/or tested, as appropriate, at</li> </ul> |

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| <p><b>ST.110.2.NY.</b> New hazardous waste storage tanks must meet recordkeeping requirements (6 NYCRR 373-2.10(c)) [Citation Revised March 2008].</p> | <p>least bimonthly (i.e., every other month)</p> <ul style="list-style-type: none"> <li>- document in the operating record of the facility an inspection of the above items.</li> </ul> <p>Verify that the facility keeps on file at the facility a written assessment, reviewed and certified by an independent, qualified, professional engineer registered in New York attesting that the tank system has sufficient structural integrity and is acceptable for storing and treating hazardous waste.</p> <p>Verify that the facility maintains on file at the facility an inspection report by someone trained and experienced in the proper installation of tank systems or components that addresses the following items:</p> <ul style="list-style-type: none"> <li>- weld breaks</li> <li>- punctures</li> <li>- scrapes of protective coatings</li> <li>- cracks</li> <li>- corrosion</li> <li>- other structural damage or inadequate construction/installation</li> <li>- information regarding the backfill material used if the tank system was placed underground</li> <li>- certification of tests showing tightness prior to being covered, enclosed, or placed in use</li> <li>- if a tank system is found not to be tight, all repairs necessary to remedy the leaks in the system are performed prior to the tank system being covered, enclosed or placed into use</li> <li>- information showing that the ancillary equipment is supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction</li> <li>- certification of the type and degree of corrosion protection, field fabricated, that is installed by an independent corrosion expert to ensure proper installation.</li> </ul> |
| <p><b>ST.110.3.NY.</b> Hazardous waste storage tank systems must meet operating requirements (6 NYCRR 373-2.10(e)) [Citation Revised March 2008].</p>  | <p>Verify that hazardous wastes or treatment reagents are not placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.</p> <p>Verify that the facility uses appropriate controls and practices to prevent spills and overflows from tanks or containment systems that includes:</p> <ul style="list-style-type: none"> <li>- spill prevention controls (e.g., check valves, dry disconnect couplings)</li> <li>- overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank)</li> <li>- maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation</li> <li>- comply with the requirements for response to leaks or spills</li> </ul>  |

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| <p><b>ST.110.4.NY.</b> Hazardous waste tank systems must meet specific requirements in response to leaks or spills and disposition of leaking or unfit-for-use tank systems (6 NYCRR 373-2.10(g)) [Revised March 2003; Citation Revised March 2008].</p> <p><b>ST.110.5.NY.</b> Hazardous waste tank systems must follow specific requirements for the closure of a tank system (6 NYCRR 373-2.10(h)) [Revised March 2003; Citation Revised March 2008].</p> <p><b>ST.110.6.NY.</b> Hazardous waste tank systems that contain ignitable or reactive waste must comply with specific requirements (6 NYCRR 373-2.10(i)) [Revised March 2003; Citation Revised March 2008].</p> | <p>- mark all tanks with the words HAZARDOUS WASTE and with other words that identify the contents of the tanks.</p> <p>(NOTE: For USTs, the markings must be placed on a sign in the area above the tank.)</p> <p>Verify that the tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, is removed from service immediately.</p> <p>Verify that any release to the environment was reported to the Commissioner within 24 h of its detection.</p> <p>Verify that the tank systems with extensive repairs are not returned to service without certification by an independent, qualified, professional engineer registered in the state</p> <p>Verify that the facility follows the following requirements for the closure of tank systems:</p> <ul style="list-style-type: none"> <li>- remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated soils, and structures and equipment contaminated with waste, and manage them as hazardous waste</li> <li>- the closure plan, closure activities, cost estimates for closure, and financial responsibility for tank systems meet all of the requirements for the closure of hazardous waste management units</li> <li>- if the facility demonstrates that not all contaminated soils can be practicably removed or decontaminated, then the facility closes the tank system and perform postclosure care in accordance with the closure and postclosure care requirements that apply to landfills.</li> </ul> <p>Verify that the waste is treated, rendered, or mixed before or immediately after placement in the tank system so that:</p> <ul style="list-style-type: none"> <li>- the resulting waste, mixture, or dissolved material no longer meets the definition of ignitable or reactive waste</li> <li>- the general operating requirements for ignitable or reactive wastes are met</li> <li>- the waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react</li> <li>- the tank system is used solely for emergencies</li> <li>- comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon (NFPA's <i>Flammable and Combustible Liquids Code</i>, Tables 2-1 through 2-6).</li> </ul> |

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| <b>ST.110.7.NY.</b> Facilities that manage incompatible wastes in tank systems must comply with specific requirements (6 NYCRR 373-2.10(j)) [Citation Revised March 2008]. | <p>Determine whether the facility manages wastes that are incompatible.</p> <p>Verify that the facility complies with the following requirements:</p> <ul style="list-style-type: none"> <li>- incompatible wastes, or incompatible wastes and materials, are not placed in the same tank system</li> <li>- hazardous waste is not placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material.</li> </ul> |



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| <p><b>ST.113</b></p> <p><b>SOLID WASTE<br/>STORAGE TANKS</b></p> <p><b>ST.113.1.NY.</b> Liquid waste storage tanks located at solid waste facilities must meet general requirements (6 NYCRR 360-6.1 and 360-6.3(a)).</p> <p><b>ST.113.2.NY.</b> Aboveground and on-ground tanks located at solid waste facilities must meet general requirements (6 NYCRR 360-6.3 (b)) [Added January 1998].</p> | <p>(NOTE: Moved from SO.175.2.NY., March 2004)</p> <p>(NOTE: Tanks may be constructed of concrete, steel or other material approved by the Department.)</p> <p>Verify that tanks are supported on a well drained stable foundation that prevents movement, rolling, or settling of the tank.</p> <p>Verify that bottoms of steel tanks that rest on earthen material are cathodically protected with either sacrificial anodes or an impressed current system which is designed, fabricated, and installed in accordance with the approved engineering report.</p> <p>Verify that exterior surfaces of all aboveground and on-ground steel storage tanks are protected by a primer coat, a bond coat, and two or more final coats of paint or have at least an equivalent surface coating system designed to prevent corrosion and deterioration.</p> <p>Verify that the interior of all aboveground and on-ground tanks consists of a material or is lined with a material, resistant to the liquid being stored.</p> <p>(NOTE: Moved from SO.175.3.NY., March 2004)</p> <p>Verify that all aboveground and on-ground tanks have a secondary containment system that may consist of dikes, liners, pads, ponds, impoundments, curbs, ditches, sumps or other systems capable of containing the liquid stored.</p> <p>Verify that the design volume for the secondary containment system is 110 percent of the volume of either the largest tank within the containment system or the total volume of all interconnected tanks, whichever is greater.</p> <p>Verify that the secondary containment system is constructed of a material compatible with the liquid stored and constructed of either:</p> <ul style="list-style-type: none"> <li>- a minimum one-foot layer of compacted soil with a maximum coefficient of permeability of <math>1 \times 10^{-7}</math> centimeters per second</li> <li>- a concrete pad of a sufficient thickness to maintain integrity for the lifetime of the tank with a corrosion resistant coating</li> <li>- a geosynthetic liner of a minimum thickness equal to 60 mils.</li> </ul> |

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| <p><b>ST.113.3.NY.</b> Aboveground and on-ground tanks located at solid waste facilities must meet operational requirements (6 NYCRR 360-6.3(c) and (e)) [Added January 1998].</p> <p><b>ST.113.4.NY.</b> Aboveground and on-ground tanks located at solid waste facilities must meet inspection requirements (6 NYCRR 360-6.3(d) [Added January 1998].</p> <p><b>ST.113.5.NY.</b> Underground tanks located at solid waste facilities must meet design requirements (6 NYCRR 360-6.4 (a) through (c),</p> | <p>Verify that the system is designed to contain and remove storm water from the secondary containment area.</p> <p>Verify that provisions are included for the removal of any accumulated precipitation (rain, snow or ice) and be initiated within 24 hours or when 10 percent of the storage capacity is reached; whichever occurs first.</p> <p>Verify that disposal from the containment is in compliance with all applicable Federal and State regulations.</p> <p>(NOTE: Moved from SO.175.4.NY., March 2004)</p> <p>Verify that all uncovered tanks have a minimum two feet of freeboard.</p> <p>Verify that odor and vector control is practiced when necessary.</p> <p>Verify that all aboveground and on-ground tanks are equipped with an overfill prevention system that may include, but not be limited to: level sensors and gauges, high-level alarms, or automatic shutoff controls.</p> <p>Verify that overfill control equipment is inspected weekly by the facility operator to ensure it is in good working order.</p> <p>(NOTE: Moved from SO.175.5.NY., March 2004)</p> <p>Verify that the facility operator for adequacy of the cathodic protection system, leaks, corrosion, and maintenance deficiencies inspects the exposed exterior of all aboveground and on-ground tanks weekly.</p> <p>Verify that interior inspection of tanks is performed whenever the tank is drained.</p> <p>Verify that, if the inspection reveals a tank or equipment deficiency, leak, or any other deficiency that could result in failure of the tank to contain the liquid, remedial measures are taken immediately to eliminate the leak or correct the deficiency.</p> <p>Verify that inspection reports are maintained and made available to the Department upon request for the lifetime of the liquid storage system.</p> <p>(NOTE: Moved from SO.175.6.NY., March 2004)</p> <p>Verify that underground tanks are placed a minimum of 2 ft above the seasonally high groundwater table and a minimum of 2 ft of vertical separation is maintained</p> |

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| (c)(2), and (c)(2)(i) [Added January 1998].   | <p>between bedrock and the lowest point of the tank.</p> <p>Verify that tanks are constructed of fiberglass reinforced plastic, steel that is cathodically protected, steel that is clad with fiberglass, or any other materials approved by the Department.</p> <p>Verify that the secondary containment and a continuous leak detection system is installed in the form of a double-walled tank, designed as an integral structure so that any release from the inner tank is completely contained by the outer shell.</p> <p>Verify that any tank system vulnerable to corrosion is protected from both corrosion of the primary tank interior and the external surface of the outer shell.</p> <p>Verify that all resistant coatings applied to the primary tank interior are chemically compatible with the liquid to be stored.</p> <p>(NOTE: Moved from SO.175.7.NY., March 2004)</p> <p>Verify that the interstitial space is monitored for tightness at least once per week by the facility operator using pressure monitoring, vacuum monitoring, electronic monitoring or an approved equivalent method.</p> <p>Verify that the cathodic protection systems, where installed, is inspected at least weekly by the facility operator.</p> <p>Verify that any deficiency in the cathodic protection system is corrected when discovered.</p> <p>Verify that all underground tanks are equipped with an overfill prevention system that may include, but not be limited to: level sensors and gauges, high-level alarms or automatic shutoff controls.</p> <p>Verify that the facility operator to ensure it is in good working order inspects all control equipment weekly.</p> <p>Verify that inspection and leak detection monitoring reports are maintained and made available upon request for the lifetime of the liquid storage system.</p> |
| <b>ST.113.6.NY.</b> Underground tanks located at solid waste facilities must meet operational requirements (6 NYCRR 360-6.4 (c)(1)(i), (c)(2)(ii), (d) and (e)) [Added January 1998].       | <p>(NOTE: Moved from SO.175.7.NY., March 2004)</p> <p>Verify that the interstitial space is monitored for tightness at least once per week by the facility operator using pressure monitoring, vacuum monitoring, electronic monitoring or an approved equivalent method.</p> <p>Verify that the cathodic protection systems, where installed, is inspected at least weekly by the facility operator.</p> <p>Verify that any deficiency in the cathodic protection system is corrected when discovered.</p> <p>Verify that all underground tanks are equipped with an overfill prevention system that may include, but not be limited to: level sensors and gauges, high-level alarms or automatic shutoff controls.</p> <p>Verify that the facility operator to ensure it is in good working order inspects all control equipment weekly.</p> <p>Verify that inspection and leak detection monitoring reports are maintained and made available upon request for the lifetime of the liquid storage system.</p>   |
| <b>ST.113.7.NY.</b> Liquid storage tanks located at solid waste facilities must meet general closure requirements (6 NYCRR 360-6.6(a) through (c) [Added January 1998; Revised March 2004]. | <p>(NOTE: Moved from SO.175.9.NY., March 2004)</p> <p>(NOTE: The owner/operator of the liquid storage facility must prepare a written closure plan for the liquid storage facility and submit the plan with the permit application for the solid waste management facility.)</p> <p>Verify that closure activities are conducted in accordance with the approved</p>   |

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| <p><b>ST.113.8.NY.</b> Liquid storage tanks located at solid waste facilities must meet specific requirements at closure (6 NYCRR 360-6.6 (c)(1) through (c)(3) [Added January 1998; Revised March 2004].</p> | <p>closure plan and within 180 days after liquid collection has ceased.</p> <p>Verify that at closure, all solid waste is removed from the tank, connecting lines, and any associated secondary containment systems.</p> <p>Verify that all solid waste removed is properly handled and disposed of according to Federal and State requirements.</p> <p>Verify that any connecting lines are disconnected and securely capped or plugged.</p> <p>(NOTE: Moved from SO.175.10.NY., March 2004.)</p> <p>Verify that underground tanks are removed or thoroughly cleaned to remove traces of waste and all accumulated sediments and then filled to capacity with a solid inert material, such as clean sand or concrete slurry.</p> <p>Verify that, if groundwater surrounding the tank is found to be contaminated, the tank and surrounding contaminated soil is removed and appropriately disposed.</p> <p>(NOTE: Other corrective actions to remediate the contaminant plume may be required by the Department.)</p> <p>Verify that accessways to aboveground and on-ground tanks are securely fastened in place to prevent unauthorized access.</p> <p>Verify that tanks are either be stenciled with the date of permanent closure or removed.</p> <p>Verify that the secondary containment system is perforated to provide for drainage.</p> |

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| <b>USED OIL<br/>STORAGE TANKS</b><br><br><b>ST.139.</b><br><br><b>State Specific Requirements</b><br><br><b>ST.139.1.NY.</b> Used oil storage tanks must meet specific design, management, and operational requirements (6 NYCRR 360-14.3(d) and (e)) [Revised March 2005; Citation Revised March 2008]. | <p>(NOTE: All aboveground used oil tanks and underground used oil tanks must comply with sections 612.2 through 612.4, 613.2 through 613.9, 614.2 through 614.14 (see applicable requirements in ST.4, ST.5, and ST.35, and ST.65 in this protocol).)</p> <p>Verify that all aboveground and underground used oil tanks meet the requirements for handling and storing petroleum and for new petroleum storage facilities except for those ASTs indicated below.</p> <p>Verify that for aboveground used oil tanks with less than 10 percent volume beneath the surface of the ground, the secondary containment minimally consists of the following:</p> <ul style="list-style-type: none"> <li>- dikes, berms, or retaining walls</li> <li>- a floor</li> <li>- an equivalent secondary containment system.</li> </ul> <p>Verify that the entire containment system, including walls and floors, is sufficiently impervious to prevent any used oil released into the system from migrating out to the soil, groundwater, or surface water.</p> <p>Verify that aboveground used oil tanks with 10 percent or more volume beneath the surface of the ground also meet the applicable requirements contained in 40 CFR 280, whether or not the used oil exhibits any characteristics of hazardous waste.</p> |

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| <p><b>ST.155.</b></p> <p><b>OTHER STORAGE TANKS</b></p> <p><b>ST.155.1.NY.</b> Stationary storage tanks that contain hazardous substances must meet registration requirements (6 NYCRR 596.1(b) and 596.2) [Revised January 1998; Citation Revised March 2004; Revised March 2010].</p> | <p>(NOTE: Moved from ST.5.9 and Revised January 1998. Repeated in part in HM.5.1.NY.)</p> <p>(NOTE: See section 3 of this protocol, HAZARDOUS MATERIALS MANAGEMENT for regulations regarding hazardous substance releases, spill prevention reports, and a list of hazardous substances.)</p> <p>(NOTE: This section applies to the following storage tanks containing hazardous substances or mixtures of hazardous substances:</p> <ul style="list-style-type: none"> <li>- aboveground storage tanks with a total capacity of 185 gal or greater</li> <li>- underground storage tanks of any capacity</li> <li>- non-stationary tanks used to store 1000 kg (2200 pounds) or more</li> <li>- any of the above storage tanks that have not been permanently closed.)</li> </ul> <p>(NOTE: These requirements do not apply to:</p> <ul style="list-style-type: none"> <li>- process tanks</li> <li>- assembly line tanks and accessory equipment the volume of which is more than 90 percent above the surface of the ground</li> <li>- storage tanks that are regulated under other articles and related to liquid natural and petroleum gas, petroleum bulk storage, solid wastes, resource recovery facilities, industrial hazardous wastes, and atomic energy</li> <li>- nonstationary tanks, barrels, drums, or other holding vessels unless used to store 2200 lb or more for 90 or more consecutive days</li> <li>- septic tanks</li> <li>- stormwater or wastewater collection systems</li> <li>- any aboveground hazardous substance tanks used for agricultural purposes on a farm</li> <li>- capacitors or transformers.</li> </ul> <p>Verify that stationary storage tanks are registered with the Department.</p> <p>Verify that the Department has been notified of changes to stationary storage tanks according to the following schedule:</p> <ul style="list-style-type: none"> <li>- within 2 hr of emergency installation or modification of a stationary tank</li> <li>- during registration renewal every 2 yr of changes in the type of hazardous substances stored in the tank.</li> </ul> <p>Verify that a current and valid temporary or permanent registration certificate is conspicuously displayed either at the tank, at the entrance to the site, or at the main office at the site where the storage tanks are located.</p> |

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| <p><b>ST.155.2.NY.</b> Hazardous substance storage tank systems in flood plains must meet specific standards (6 NYCRR 598.3) [Added January 1998; Citation Revised March 2008].</p>            | <p>Verify that hazardous substances are not delivered to unregistered storage tanks.</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>Verify that hazardous substance storage tank systems susceptible to inundation by water are adequately anchored to prevent flotation, collapse, or lateral movement that might be caused by hydrodynamic and hydrostatic loads, including the effect of buoyancy.</p> <p>Verify that ballast water removed from a tank after a flood is not discharged to the waters of the state without first obtaining a discharge permit.</p>  |
| <p><b>ST.155.3.NY.</b> Hazardous substance storage tank secondary containment systems must meet vegetation standards (6 NYCRR 598.9(g)) [Added January 1998; Citation Revised March 2008].</p> | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>Verify that no vegetation except grass grows within a hazardous substance storage tank secondary containment system.</p> <p>Verify that grass within the secondary containment system is no longer than 6 in.</p> <p>Verify that dead vegetation that could endanger the tanks if ignited is not allowed within the secondary containment system.</p>   |
| <p><b>ST.155.4.NY.</b> Underground hazardous substance storage tank systems must meet testing and inspection standards (6 NYCRR 598.6) [Added January 1998].</p>                               | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>Verify that underground hazardous substance storage tank ancillary equipment is visually inspected monthly for cleanliness, leakage, corrosion, and operability.</p> <p>Verify that underground and on-ground pipes are checked monthly for leakage using a method that can detect a leak from any portion of the piping that routinely contains a hazardous substance.</p> <p>Verify that the following parts of underground hazardous substance storage tank systems are tested annually to ensure operability:</p> <ul style="list-style-type: none"> <li>- automatic line leak detectors</li> <li>- cathodic systems that provide protection to tanks or pipes and are subject to corrosion.</li> </ul> <p>Verify that tanks reconditioned with an internal liner are internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications within 10 yr of reconditioning and every 5 yr thereafter.</p> <p>Verify that underground hazardous substance storage tanks are checked for</p> |

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| <p><b>ST.155.5.NY.</b> Aboveground hazardous substance storage tank systems must meet inspection standards (6 NYCRR 598.7) [Added January 1998; Revised March 2009].</p> | <p>leakage using one or more of the following methods:</p> <ul style="list-style-type: none"> <li>- monthly inventory monitoring that detects a leak of one percent of flow-through plus 130 gal coupled with annual tightness testing</li> <li>- weekly monitoring of the interstitial space of a double-walled tank using pressure monitoring, vacuum monitoring, electronic monitoring, or manual sampling</li> <li>- vapor wells to monitor soils in the excavation zone</li> <li>- groundwater monitoring wells</li> <li>- weekly monitoring using an automatic tank gauging equipment</li> <li>- other method approved by the Department.</li> </ul> <p>Verify that, if required testing or inspection is not performed for any reason, the uninspected portion of the storage tank system is taken out-of-service.</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>Verify that aboveground hazardous substance storage tank systems are checked daily for the following:</p> <ul style="list-style-type: none"> <li>- spills and leaks</li> <li>- unpermitted discharges of contaminated water or hazardous substances</li> <li>- that drain valves are closed if not in use.</li> </ul> <p>Verify that aboveground hazardous substance storage tank cathodic systems that provide protection to tanks or pipes and are subject to corrosion are tested monthly to ensure proper operation.</p> <p>Verify that aboveground hazardous substance storage tanks (including any connected underground pipes), the volume of which is 10 percent or more beneath the surface of the ground, are checked monthly for leakage using one or more of the following:</p> <ul style="list-style-type: none"> <li>- monthly inventory monitoring that detects a leak of one percent of flow-through plus 130 gal coupled with annual tightness testing</li> <li>- weekly monitoring of the interstitial space of a double-walled tank using pressure monitoring, vacuum monitoring, electronic monitoring, or manual sampling</li> <li>- vapor wells to monitor soils in the excavation zone</li> <li>- groundwater monitoring wells</li> <li>- weekly monitoring using automatic tank gauging equipment</li> <li>- other method approved by the Department.</li> </ul> <p>Verify that underground and on-ground pipes are checked monthly for leakage using a method that can detect a leak from any portion of the piping that routinely contains a hazardous substance.</p> <p>Verify that there are annual comprehensive inspections of the aboveground</p> |



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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>ST.155.6.NY.</b> Hazardous substance storage tanks must be maintained and repaired (6 NYCRR 598.9(a), (b), (e), (f), and (h)) [Added January 1998; Revised March 2010].</p> | <p>hazardous substance storage tank system which include all of the following:</p> <ul style="list-style-type: none"> <li>- visual inspection for cracks, areas of wear, corrosion, poor maintenance and operating practices, excessive settlement of structures, separation or swelling of tank insulation, malfunctioning equipment, safety interlocks, safety trips, automatic shutoffs, leak detection, and monitoring, warning, or gauging equipment which may not be operating properly</li> <li>- visual inspection of dikes and other secondary containment systems for erosion, cracks, evidence of releases, excessive settlement, and structural weaknesses</li> <li>- checking the adequacy of exterior coatings, corrosion protection systems, exterior welds and rivets, foundations, spill control equipment, emergency response equipment, and fire extinguishing equipment</li> <li>- visual check of equipment, structures, and foundations for excessive wear or damage.</li> </ul> <p>Verify that, if required testing or inspection is not performed for any reason, the uninspected portion of the storage tank system is taken out-of-service.</p> <p>(NOTE: All aboveground tanks must be inspected by 22 December 1999.)</p> <p>Verify that, for aboveground tanks with a capacity of 10,000 gallons or more, the inspection is conducted under the direction of a qualified engineer.</p> <p>Verify that, if any portion of a storage tank system is not inspected as required, the owner or operator takes the uninspected portion of the system out-of-service.</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>Verify that, if inspection shows that there is threat of an imminent release, one of the following steps is taken:</p> <ul style="list-style-type: none"> <li>- the operation or practice at fault is promptly modified or discontinued</li> <li>- inadequacies in the storage tank system are promptly replaced or repaired</li> <li>- the storage tank system is taken out-of-service.</li> </ul> <p>Verify that, if inspection shows that a leak or release is likely or probable, one of the following steps is taken:</p> <ul style="list-style-type: none"> <li>- the practice at fault is modified or discontinued</li> <li>- inadequate equipment is repaired or replaced within 90 days, removed from service, or temporarily closed.</li> </ul> <p>Verify that repairs are made permanent within 90 days.</p> <p>(NOTE: Upon receipt of a written request before the expiration of the 90 day period the Department may extend the period for temporary repairs to 180 days.)</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>ST.155.7.NY.</b> Technical guidance and recommended practices must be kept on file for hazardous substance storage tanks (6 NYCRR 596.5) [Revised January 1998; Citation Revised March 2008].</p> | <p>Verify that repairs equal or exceed the standard of original construction and are in accordance with generally accepted engineering practices.</p> <p>Verify that repaired equipment is inspected for tightness and soundness before it is returned to service.</p> <p>(NOTE: By December 22, 1999, the exposed exterior surfaces of all aboveground tanks, piping and ancillary equipment must have been protected from corrosion.)</p> <p>Verify that all rupture disks are replaced with new ones at least every 3 years, or in accordance with any other frequency recommended by the disk manufacturer, or justified on the basis of operating experience in the spill prevention report.</p> <p>(NOTE: Moved from ST.5.10 and Revised January 1998.)</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>Verify that technical guidance and recommended practices for storage and handling are provided along with shipment of hazardous substances.</p> <p>Verify that the guidance and recommended practices are kept on file at the site where the storage tank is located.</p> <p>(NOTE: The technical guidance and recommended practice file may include the following:</p> <ul style="list-style-type: none"> <li>- reference or identification of industry standards</li> <li>- recommended practices, procedures, precautions, and advice</li> <li>- chemical abstract service number</li> <li>- chemical and common name</li> <li>- hazardous substance mixture components</li> <li>- physical and chemical characteristics</li> <li>- toxic and hazardous properties</li> <li>- storage tank material construction and standards</li> <li>- conditions for safe and proper substance storage</li> <li>- recommended storage equipment</li> <li>- recommended inspection and maintenance procedures</li> <li>- safety precautions for handling</li> <li>- spill and emergency response procedures.)</li> </ul> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>Verify that reports for each required monthly, annual, or 5 yr test or inspection is kept with the spill prevention report and made available to the Department upon request.</p> <p>Verify that records of annual inspections are maintained for 5 yr and reports of</p> |
| <p><b>ST.155.8.NY.</b> Hazardous substance storage tank systems must meet recordkeeping standards (6 NYCRR 598.8) [Added January 1998].</p>   |  |

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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>ST.155.9.NY.</b> Hazardous substance storage tanks meet specific standards if undergoing a change in service (6 NYCRR 598.10(a)) [Added January 1998].</p> <p><b>ST.155.10.NY.</b> Hazardous substance storage tanks that are temporarily out of service must meet specific standards (6 NYCRR 598.10(b)) [Added January 1998].</p> | <p>other inspections or tests are maintained for 10 yr.</p> <p>(NOTE: No records are required for daily inspections.)</p> <p>Verify that inspection reports include the following information:</p> <ul style="list-style-type: none"> <li>- facility registration number</li> <li>- identification number for tank, piping or equipment tested or inspected</li> <li>- date of test or inspection</li> <li>- results of tests and inspections, including a report on the condition of piping, tank and ancillary equipment, expected life of service and need for repair</li> <li>- test and inspection methods used</li> <li>- certification by the engineer or technician that the test or inspection has been performed</li> <li>- statement of engineer or technician's qualifications</li> <li>- name of engineer or technician</li> <li>- business address of engineer or technician</li> <li>- signature of engineer or technician.</li> </ul> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>Verify that, if the substance stored within an existing tank is switched to a hazardous substance or from one hazardous substance to another, the storage system is evaluated by a qualified engineer to determine that materials are compatible, pressure and vacuum relief systems are adequate, and that the storage tank and related system is properly designed and suitable for the change.</p> <p>Verify that before any underground tank or aboveground tank having a volume of 10 percent or more beneath the surface of the ground is converted from storing a hazardous to a nonhazardous substance, a site assessment is performed.</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>Verify that ASTs and USTs which are temporarily out-of-service for 30 or more days are closed as follows:</p> <ul style="list-style-type: none"> <li>- all product is removed from the tank and piping system to the lowest drawoff point</li> <li>- any waste product removed from the tank is disposed of in accordance with applicable state, local and federal requirements</li> <li>- tanks are protected from floatation in accordance with generally accepted engineering practices</li> <li>- manways are locked or bolted securely</li> <li>- fill lines, gauge openings or pump lines are capped, locked out or plugged to prevent unauthorized use or practices.</li> </ul> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>ST.155.11.NY.</b> Hazardous substance storage tanks that are permanently out of service must meet specific closure standards (6 NYCRR 598.10(c) and (f)) [Added January 1998].</p> | <p>Verify that storage tanks or facilities that are temporarily out-of-service continue to meet registration, leak detection and reporting requirements.</p> <p>Verify that tanks out-of-service for more than 1 yr are inspected or tested and determined to be structurally sound and tight before being returned to service.</p> <p>Verify that underground tanks and aboveground tanks with a volume that is 10 percent or more beneath the surface of the ground that are temporarily out-of-service for more than 1 yr are permanently closed if the tank has not been protected from corrosion.</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>(NOTE: Any aboveground or underground tank that is permanently out-of-service may be used to store a substance that is not a hazardous substance.)</p> <p>Verify that any aboveground or underground tank which is permanently out-of-service is closed in accordance with the following requirements:</p> <ul style="list-style-type: none"> <li>- liquid and sludge are removed from the tank and connecting lines</li> <li>- any waste products removed are transported and disposed of in accordance with all applicable state, local and federal requirements</li> <li>- the tank is cleaned and rendered free of hazardous vapors</li> <li>- provisions are made for natural breathing of the tank to ensure that the tank remains free of hazardous vapors</li> <li>- connecting lines are disconnected and removed or securely capped, or locked out or plugged.</li> <li>- manways are securely fastened in place</li> <li>- aboveground tanks are stenciled with the date of permanent closure</li> <li>- underground tanks are removed unless it will be detrimental to a building foundation or other structure</li> <li>- underground tanks that are abandoned in-place are filled with a solid inert material such as sand, concrete slurry, synthetic filler or cellular concrete</li> <li>- tanks are protected from floatation caused by flooding or high ground water level in accordance with generally accepted engineering practices</li> <li>- secondary containment systems of permanently closed ASTs have drainage for accumulated water or precipitation.</li> </ul> <p>Verify that tanks to be used to store a substance not defined as a hazardous substance are emptied and cleaned prior to storing the new substance.</p> <p>Verify that tanks to be disposed of as junk are retested for hazardous vapors, rendered vapor free if necessary, cleaned of any residuals or sludge, and punched with holes or otherwise made unfit for storage.</p> <p>Verify that the Department is notified when a storage tank system is to be permanently closed.</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>ST.155.12.NY.</b> Hazardous substance storage tank systems must meet site assessment standards (6 NYCRR 598.10(e)) [Added January 1998; Revised March 2010].</p>   | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>Verify that a site assessment is performed at the time of permanent closure of any underground tank or aboveground tank 10 percent or more inground.</p> <p>(NOTE: A site assessment may be required of any tank permanently closed prior to 11 August 1994 if in the judgment of the Department the tank poses a current or potential threat to human health or the environment.)</p> <p>Verify that the site assessment includes soil, vapor, or ground-water monitoring in sufficient depth to determine whether environmental contamination exists in the vicinity of the tank site.</p> <p>Verify that the type of monitoring and number and location of samples is based on geology, water table contours, aquifer thickness, porosity, background water quality and the substance known or suspected to have been stored at the facility.</p> <p>Verify that, if contaminated soil vapor, groundwater or free product is discovered, corrective action is initiated.</p> <p>Verify that the site assessment report is prepared by a qualified engineer or technician.</p> <p>Verify that records of the date of closure and the closure report are incorporated or referenced in the spill prevention report and maintained for the life of the facility.</p> |
| <p><b>ST.155.13.NY.</b> New hazardous substance storage tank systems must have an alarm of automatic shutoff to prevent spill and overfill (6 NYCRR 599.17(b)(1)(i)) [Added January 1998; Revised March 2010].</p> | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>Verify that new hazardous substance aboveground and underground tanks are equipped with one of the following:</p> <ul style="list-style-type: none"> <li>- a device which will alert the operator or carrier by triggering either a high-level warning alarm when the product reaches ninety-five percent of the working capacity of the tank</li> <li>- a device such as a high-level trip (delivery cut-off system) which will automatically shut off or restrict flow when the product level reaches the working capacity of the tank</li> <li>- an automatic by-pass to an overflow tank if the overflow tank is equipped with overflow protection or other equivalent systems for preventing overfills.</li> </ul> <p>Verify that, where filling or emptying is remotely operated, alarms and remote flow controls are located at the remote operating station</p>   |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <b>ST.155.14.NY.</b> New hazardous substance storage tank system gauges must meet specific standards (6 NYCRR 599.17(b)(1)(iii)) [Added January 1998; Revised March 2010].          | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>Verify that new aboveground tanks are equipped with a gauge or other monitoring device which meets all of the following requirements:</p> <ul style="list-style-type: none"> <li>- accurately determines the level or quantity of the substance in the tank</li> <li>- is accessible to the operator or carrier</li> <li>- is installed so that it can be conveniently read.</li> </ul> <p>Verify that the tank design capacity, working capacity, and identification number are clearly marked at the gauge.</p> <p>Verify that, where filling or emptying is remotely operated, gauges are located at the remote operating station.</p>   |
| <b>ST.155.15.NY.</b> New hazardous substance storage tank system valves and couplings must meet specific standards (6 NYCRR 599.17(b)(2)) [Added January 1998; Revised March 2010]. | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>Verify that couplings or open-ended valves used for making a transfer are located within the secondary containment system of the transfer station.</p> <p>Verify that, where a product transfer line or fill line is not drained of liquid upon completion of a transfer operation, it is equipped with a valve such as a dry disconnect shutoff valve which prevents discharges from the line.</p> <p>Verify that, where siphoning or back flow is possible, fill pipes are equipped with a properly functioning check valve, siphon break, or equivalent device or system which provides automatic protection against backflow.</p> <p>Verify that, each tank connection through which a hazardous substance can normally flow is equipped with an operating valve or other appropriate means to control such flow.</p> <p>Verify that valves have sufficient capacity, control characteristics, and mechanical balance for the application.</p> <p>Verify that it is possible to manual control valves or that they have fail-safe features that operate in the event of a power loss.</p> |
| <b>ST.155.16.NY.</b> New hazardous substance storage tank systems must meet labeling standards (6 NYCRR 599.17(b)(1)(ii)) [Added January 1998; Revised March                        | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>Verify that monitoring wells are permanently labeled as a "monitoring well".</p> <p>Verify that fill ports are labeled in accordance with all of the following</p>  |

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| <p>2010].</p> <p><b>ST.155.17.NY.</b> New hazardous substance storage tanks must be protected from over-pressurization and excessive vacuums (6 NYCRR 599.18(a)(1)) [Added January 1998; Revised March 2010].</p> <p><b>ST.155.18.NY.</b> New hazardous substance storage tanks must meet venting standards (6 NYCRR 599.18(a)(3) through (9)) [Added January 1998; Revised March 2010].</p> | <p>requirements:</p> <ul style="list-style-type: none"> <li>- permanently labeled as a "test well no fill"</li> <li>- contain information on the point of delivery</li> <li>- if remote to the tank, are labeled with the chemical name or common name or category of substance and display legible and clearly visible hazard warnings (for a registered tank this would be the tank identification number).</li> </ul> <p>Verify that dispensing ports for aboveground tanks that are remote to the tank are labeled with the chemical name or common name or category of substance and display legible and clearly visible hazard warnings.</p> <p>Verify that valves and controllers that govern the filling and emptying of a storage tank contain information on closed and open positions.</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>Verify that new tanks are protected from over-pressurization and excessive vacuums by one or a combination of the following:</p> <ul style="list-style-type: none"> <li>- vents</li> <li>- rupture discs</li> <li>- pressure/vacuum relief devices</li> <li>- controllers</li> <li>- fail-safe vessel designs</li> <li>- other means determined by a qualified engineer.</li> </ul> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>Verify that open vents are provided with a flame-arresting device if used on a tank containing a flammable hazardous substance or if used on tanks containing a hazardous substance that is heated above its flash point.</p> <p>Verify that vent discharge openings are designed and constructed to prevent interference of operation due to precipitation.</p> <p>Verify that discharge from vents does not terminate in or underneath any building if the discharge could pose a fire, health, or safety problem.</p> <p>Verify that vents have provisions for draining any condensate that may accumulate.</p> <p>Verify that vents are arranged so that the possibility of tampering is minimized.</p> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>ST.155.19.NY.</b> New hazardous substance storage tank relief valves must meet labeling standards (6 NYCRR 599.18(d)) [Added January 1998; Revised March 2010].</p>                    | <p>Verify that vents have direct contact with the vapor space of the tank.</p> <p>Verify that the capacity of any vent is not restricted below design.</p> <p>Verify that atmospheric, low-pressure, and high-pressure aboveground tanks have emergency vents to insure that the safe pressure for that tank is not exceeded.</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>Verify that, where safety, pressure relief, or vacuum relief valves are used, each is permanently labeled with the following information:</p> <ul style="list-style-type: none"> <li>- the name or identifying trademark of the manufacturer</li> <li>- the manufacturer's design or type number</li> <li>- the pipe size of the inlet</li> <li>- the set pressure or vacuum, in pounds per square inch gauge (PSIG)</li> <li>- the full open pressure or vacuum, in PSIG</li> <li>- the capacity at the indicated pressure or full open vacuum in either cubic feet of gas per minute or cubic feet of gas per hour.</li> </ul>                          |
| <p><b>ST.155.20.NY.</b> New hazardous substance storage tanks must meet pressure, vacuum, and thermal monitoring standards (6 NYCRR 599.18(e)) [Added January 1998; Revised March 2010].</p> | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>Verify that tanks subject to failure due to pressure or vacuum are provided with pressure/vacuum gauges and pressure/vacuum controllers.</p> <p>Verify that thermal monitors, pressure/vacuum indicators, and their corresponding alarms are provided for all storage tanks where a reaction may cause damage to the storage system or endanger human health or the environment.</p> <p>Verify that heated or cooled tanks are equipped with a temperature and pressure gauge and appropriate thermal controls.</p> <p>Verify that special precaution against overheating or overcooling is provided for heated or cooled tanks in accordance with generally accepted engineering practices by one or a combination of the following:</p> <ul style="list-style-type: none"> <li>- temperature controllers</li> <li>- insulation</li> <li>- alarms</li> <li>- fail-safe cooling systems</li> <li>- material selection</li> <li>- other means determined by a qualified engineer.</li> </ul> |



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| <p><b>ST.155.21.NY.</b> New aboveground hazardous substance storage tanks must meet installation standards (6 NYCRR 599.11(b) through (e) and (j)) [Added January 1998; Revised March 2010].</p> | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>(NOTE: As of 13 February 1995 all new storage tank systems or additions or replacements to parts of existing storage tanks systems must be constructed, designed, and installed in accordance with the following requirements.)</p> <p>(NOTE: New storage tank systems must continue to meet all the requirements for existing systems.)</p> <p>Verify that the following requirements are met prior to installation of an underground tank:</p> <ul style="list-style-type: none"> <li>- if required, a building permit is obtained</li> <li>- 24 h notice is given to the local building or fire code enforcement official.</li> </ul> <p>Verify that new ASTs have a stable and well drained foundation, footing, and structural support that are capable of supporting the total weight of the tank when full.</p> <p>Verify that horizontal aboveground tanks are supported in such a manner as to permit expansion and contraction and to prevent the concentration of excessive loads on the supporting portion of the shell.</p> <p>Verify that tanks, piping, and ancillary equipment are protected against physical damage by freezing or vehicular traffic.</p> <p>Verify that new aboveground tanks are separated from incompatible hazardous substances.</p> <p>Verify that new aboveground tanks and dikes are accessible by fire fighting and other emergency response equipment.</p> |
| <p><b>ST.155.22.NY.</b> New aboveground hazardous substance storage tank systems must be inspected before being placed in use (6 NYCRR 599.11(f)) [Added January 1998; Revised March 2010].</p>  | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>(NOTE: New storage tank systems must continue to meet all the requirements for existing systems.)</p> <p>Verify that, prior to covering, enclosing, or placing a tank and ancillary equipment in use, aboveground hazardous substance storage tank systems are inspected by a qualified inspector for the following:</p> <ul style="list-style-type: none"> <li>- weld breaks</li> <li>- punctures</li> <li>- scrapes of protective coatings</li> </ul>  |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>ST.155.23.NY.</b> New aboveground hazardous substance storage tanks must meet design and safety standards (6 NYCRR 599.8(d)(1) and (6), (e), (g), and (h)) [Added January 1998; Revised March 2010].</p> | <ul style="list-style-type: none"> <li>- cracks</li> <li>- corrosion</li> <li>- other structural damage</li> <li>- improper installation</li> <li>- tightness.</li> </ul> <p>Verify that, if a storage tank system is found to be leaking or the tank or installation is deficient such that a leak is possible, such deficiencies are remedied prior to the system being placed in use.</p> <p>Verify that the inspector signs and dates a statement certifying that all installation standards were met.</p> <p>Verify that the inspector's statement, records of the test, and any repairs necessary to correct deficiencies are kept for 5 yr following the date of installation and made part of the spill prevention report.</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>(NOTE: New storage tank systems must continue to meet all the requirements for existing systems.)</p> <p>Verify that the bottoms of new hazardous substance storage tanks which rest on or in the soil and are subject to corrosion are protected from external corrosion by one of the following:</p> <ul style="list-style-type: none"> <li>- corrosion resistant materials</li> <li>- a cathodic protection system.</li> </ul> <p>Verify that new aboveground tanks are isolated from or protected against stray electric currents which include underground cables, electric machinery, railroad systems and electrical grounding rods.</p> <p>Verify that new aboveground tanks with a storage capacity of 5,000 gal or more are provided with an access lid or manhole.</p> <p>Verify that new aboveground tanks that are designed to rest on the ground are constructed with a double bottom or underlain by an impervious barrier such as a concrete pad or a cutoff barrier that will not deteriorate in an underground environment or in the presence of the hazardous substance being stored.</p> <p>Verify that tanks are protected from explosion by fail-safe cooling systems, fire-proofing, depressurizing valves, foundation sloping, or other equally effective means that are in accordance with generally accepted engineering practices and acceptable to the Department.</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>ST.155.24.NY.</b> New aboveground hazardous substance storage tanks must meet leak detection standards (6 NYCRR 599.10) [Added January 1998; Revised March 2010].</p>       | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>(NOTE: New storage tank systems must continue to meet all the requirements for existing systems.)</p> <p>Verify that new aboveground hazardous substance storage tanks have a system for monitoring leakage between the tank bottom and the secondary containment system.</p> <p>(NOTE: Tanks which are entirely aboveground, such as tanks on racks, cradles or stilts, may be visually monitored for leakage to meet this requirement.)</p> <p>(NOTE: Observation wells or other systems that monitor the soil or groundwater external to the secondary containment system do not satisfy the leak detection requirements of this section.)</p>  |
| <p><b>ST.155.25.NY.</b> New aboveground hazardous substance storage tanks must meet secondary containment standards (6 NYCRR 599.9) [Added January 1998; Revised March 2010].</p> | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>(NOTE: New storage tank systems must continue to meet all the requirements for existing systems.)</p> <p>Verify that new aboveground hazardous substance storage tanks have a secondary containment system that collects and contains leaks or spills.</p> <p>Verify that the secondary containment system consists of one of the following:</p> <ul style="list-style-type: none"> <li>- a surrounding dike and impoundment system</li> <li>- a remote catch tank or impoundment area</li> <li>- another comparable system or practice.</li> </ul> <p>Verify that, if the substance stored in an aboveground tank is a liquid at storage conditions and a gas at ambient conditions, secondary containment is provided to contain the liquid component of any spill until the phase change from liquid to gas occurs or the spill is cleaned up, whichever comes first.</p> <p>Verify that the system is capable of containing at least 110 percent of the capacity of the largest tank or manifolded tanks that are connected in such a way as to permit the combined contents to spill whichever is greater.</p> <p>Verify that overfills from connections, vents and pressure relief devices occur within the secondary containment system or are directed to another appropriate collection device.</p> <p>Verify that the secondary containment system is constructed, coated, or lined with</p> |

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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>ST.155.26.NY.</b> New underground hazardous substance storage tanks must meet installation standards (6 NYCRR 599.6(f) and (h)) [Added January 1998; Revised March 2010].</p> | <p>materials that are chemically compatible with the substance stored and the environment.</p> <p>Verify that the secondary containment system is placed on a foundation that prevents settlement, compression, or uplift.</p> <p>Verify that the secondary containment system is equipped with a drainage system, control of which is located outside the diked area.</p> <p>Verify that valves for gravity drainage systems are locked in a closed position except when the operator is draining accumulated liquids from the containment area.</p> <p>Verify that spilled or leaked substances are removed from the secondary containment system within 24 h.</p>   |
|   | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>(NOTE: New storage tank systems must continue to meet all the requirements for existing systems.)</p> <p>(NOTE: As of 13 February 1995 all new storage tank systems or additions or replacements to parts of existing storage tanks systems must be constructed, designed, and installed in accordance with the following requirements.)</p> <p>Verify that the following requirements are met prior to installation of an underground hazardous substance storage tank:</p> <ul style="list-style-type: none"> <li>- if required, a building permit is obtained</li> <li>- 24 h notice is given to the local building or fire code enforcement official.</li> </ul> <p>Verify that connections to new underground hazardous substance storage tanks are located within a containment chamber which meets the following requirements:</p> <ul style="list-style-type: none"> <li>- constructed of a compatible material</li> <li>- capable of containing hazardous substance leaks from the connections</li> <li>- fitted with a manhole or other means of access so that connections can be inspected.</li> </ul> <p>Verify that valves and other ancillary equipment are protected against physical damage by freezing or vehicular traffic.</p> |
| <p><b>ST.155.27.NY.</b> New underground hazardous substance storage tanks must</p>  | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p>   |

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| <p>be inspected before being placed in use (6 NYCRR 599.6(g)) [Added January 1998; Revised March 2010].</p>   | <p>(NOTE: New storage tank systems must continue to meet all the requirements for existing systems.)</p> <p>Verify that, prior to covering, enclosing, or placing a tank and ancillary equipment in use, hazardous substance storage tank systems are inspected by a qualified inspector for the following:</p> <ul style="list-style-type: none"> <li>- weld breaks</li> <li>- punctures</li> <li>- scrapes of protective coatings</li> <li>- cracks</li> <li>- corrosion</li> <li>- other structural damage</li> <li>- improper installation</li> <li>- tightness.</li> </ul> <p>Verify that, if a storage tank system is found to be leaking or the tank or installation is deficient such that a leak is possible, such deficiencies are remedied prior to the system being placed in use.</p> <p>Verify that the inspector signs and dates a statement certifying that all installation standards were met.</p> <p>Verify that the inspector's statement, records of the test, and any repairs necessary to correct deficiencies are kept for 5 yr following the date of installation and made part of the spill prevention report.</p> |
| <p><b>ST.155.28.NY.</b> New underground hazardous substance storage tanks must meet labeling standards (6 NYCRR 599.3(a)) [Added January 1998; Revised March 2010].</p> | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>(NOTE: New storage tank systems must continue to meet all the requirements for existing systems.)</p> <p>Verify that new underground tanks bear a permanent stencil, label, or plate with the following information:</p> <ul style="list-style-type: none"> <li>- manufacturer's or qualified engineer's statement that, "This tank conforms with 6 NYCRR Part 599"</li> <li>- the standard of design by which the tank was manufactured</li> <li>- the hazardous substances which may be stored permanently and compatibly within the tank, or reference to a list available from the manufacturer which identifies products compatible with all tank materials</li> <li>- the year the tank was manufactured</li> <li>- the dimensions, design and working capacity and model number of the tank</li> <li>- the name of the manufacturer.</li> </ul> <p>Verify that a label that shows the above information and the date of installation</p>  |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>ST.155.29.NY.</b> New underground hazardous substance storage tanks must meet leak detection standards (6 NYCRR 599.5) [Added January 1998; Revised March 2010].</p> <p><b>ST.155.30.NY.</b> New underground hazardous substance storage tanks must meet secondary containment standards (6 NYCRR 599.4) [Added January 1998; Revised March 2010].</p> | <p>are conspicuously displayed and permanently affixed at the tank's fill port.</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>(NOTE: New storage tank systems must continue to meet all the requirements for existing systems.)</p> <p>Verify that new underground tanks are equipped with either pressure monitoring, vacuum monitoring, or electronic monitoring equipment capable of detecting leakage between the tank and secondary containment system.</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions. New hazardous substance storage tanks are those installed after July 12, 1994.)</p> <p>(NOTE: New storage tank systems must continue to meet all the requirements for existing systems.)</p> <p>Verify that releases, spills and accumulated liquids are detained or collected by the secondary containment system until the collected material is removed.</p> <p>Verify that new underground hazardous substance storage tanks have a secondary containment system which consists of one of the following:</p> <ul style="list-style-type: none"> <li>- a double-walled tank</li> <li>- a vault</li> <li>- a synthetic liner</li> <li>- other comparable system.</li> </ul> <p>Verify that double-walled tanks meet the following requirements:</p> <ul style="list-style-type: none"> <li>- the outer wall contains a release from any portion of the inner wall and encloses the entire primary tank</li> <li>- the tank is designed so that monitoring of the interstitial space for tightness can be readily performed</li> <li>- there is no penetration through the outer wall into the tank, except top entry manholes and fittings required for filling the tank, venting the tank, or monitoring the tank</li> <li>- the outer wall is resistant to puncture and protected from corrosion</li> <li>- the outer wall is designed to contain an inert gas or liquid at a pressure greater than the maximum internal pressure of the inner wall.</li> </ul> <p>Verify that vaults are:</p> <ul style="list-style-type: none"> <li>- water tight</li> <li>- impervious to leakage of hazardous substances</li> </ul> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>ST.155.31.NY.</b> New piping in hazardous substance storage systems must meet installation standards (6 NYCRR 599.16(a) through (d) and (f)) [Added January 1998].</p> | <ul style="list-style-type: none"> <li>- compatible with the substance in storage</li> <li>- able to withstand chemical deterioration and structural stresses from internal and external causes</li> <li>- a continuous structure with a chemical resistant water stop used at all joints</li> <li>- free of drain connections or other entries through the vault except for top entry manholes and other top openings for filling and emptying the tank, venting and for monitoring and pumping of hazardous substances which may leak into the vault</li> <li>- equipped with a tank or tanks that are supported, backfilled or bedded in a manner consistent with generally acceptable engineering practices.</li> </ul> <p>Verify that synthetic liners are:</p> <ul style="list-style-type: none"> <li>- compatible with the substance in storage</li> <li>- at least 60 mils in thickness</li> <li>- able to withstand an underground environment without deterioration.</li> </ul> <p>Verify that the life expectancy of the synthetic liner is specified in the spill prevention report.</p> <p>Verify that synthetic liners are tested and found resistant to diffusion of the substance stored.</p> <p>(NOTE: As of 13 February 1995 all new piping systems or additions or replacements to parts of existing storage tanks systems must be constructed, designed, and installed in accordance with the following requirements.)</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>(NOTE: New piping systems must continue to meet all the requirements for existing storage tank systems.)</p> <p>Verify that new piping systems are installed in accordance with generally accepted engineering practices and manufacturer's instructions.</p> <p>Verify that new piping system joints are liquid and air tight.</p> <p>Verify that new piping systems that are placed underground and are backfilled meet the following requirements:</p> <ul style="list-style-type: none"> <li>- the backfill material is a non-corrosive, porous, homogeneous substance</li> <li>- the backfill is placed completely around the piping and compacted to ensure that the piping is uniformly supported</li> <li>- backfill of at least 6 in. in depth is placed underneath the piping.</li> </ul> <p>Verify that new piping systems buried underground are placed so that the top of the piping is at least 18 in. below the surface of the ground.</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>ST.155.32.NY.</b> New piping in hazardous substance storage systems must be inspected before being placed in use (6 NYCRR 599.16(e)) [Added January 1998; Revised March 2010].</p> | <p>Verify that, should conditions make compliance with the burial requirement impracticable, precautions are taken to prevent physical damage to the piping.</p> <p>(NOTE: It is not necessary to cover the portion of the piping to which an access port is affixed.)</p> <p>Verify that installation of a field fabricated corrosion protection system is supervised by a corrosion expert.</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>(NOTE: As of 13 February 1995 all new piping systems or additions or replacements to parts of existing storage tanks systems must be constructed, designed, and installed in accordance with the following requirements.)</p> <p>(NOTE: New piping systems must continue to meet all the requirements for existing storage tank systems.)</p> <p>Verify that, prior to covering, enclosing, or placing a new piping system in use, the system is inspected by a qualified inspector for the following:</p> <ul style="list-style-type: none"> <li>- weld breaks</li> <li>- punctures</li> <li>- scrapes of protective coatings</li> <li>- cracks</li> <li>- corrosion</li> <li>- structural damage</li> <li>- improper installation.</li> </ul> <p>Verify that, if a piping system is found not to be tight or to be defective in any way, necessary repairs are performed prior to the system being placed in use.</p> <p>Verify that the inspector signs and dates a statement certifying that all installation standards were met.</p> <p>Verify that record of the examination, procedures, inspection personnel, and personnel qualifications are kept for 5 yr following the date of inspection and made part of the spill prevention report.</p> |
| <p><b>ST.155.33.NY.</b> New piping in hazardous substance storage systems must meet design and safety standards (6 NYCRR 599.13) [Added January 1998; Revised March</p>                  | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>(NOTE: As of 13 February 1995 all new piping systems or additions or replacements to parts of existing storage tanks systems must be constructed, designed, and installed in accordance with the following requirements.)</p> <p>(NOTE: New piping systems must continue to meet all the requirements for</p>   |



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| <p>2010].</p> <p><b>ST.155.34.NY.</b> New piping in hazardous substance</p>     | <p>existing storage tank systems.)</p> <p>Verify that new piping systems are compatible with the substances stored and protected or resistant to all forms of internal and external wear, vibration, shock and corrosion.</p> <p>Verify that new piping systems are free of leakage, structurally sound, properly supported under all operating conditions, and protected from fire, heat, vacuum, and pressure which would cause the system to fail.</p> <p>Verify that pipes are designed to prevent damage from expansion, jarring, vibration, contraction, and frost.</p> <p>Verify that exposed piping is protected from physical damage that might result from moving machinery such as fork lifts, automobiles, and trucks.</p> <p>Verify that joint compounds and gaskets are compatible with the substances in storage.</p> <p>Verify that piping contains shut-off valves located adjacent to pump or compressor connections.</p> <p>Verify that flexible connectors, elbows, loops, expansion chambers, or other measures are installed singularly, or in combination, to allow for movement and prevent damage from water hammer.</p> <p>Verify that piping systems that carry liquid hazardous substances that expand upon freezing are protected from freezing or have provisions to prevent rupture due to freezing of the hazardous substance.</p> <p>Verify that refrigerated piping systems are constructed of materials suitable for extreme temperatures and pressures in the storage system.</p> <p>Verify that piping systems which employ screw-type fittings are provided with means to prevent leakage from these fittings.</p> <p>Verify that new piping systems in contact with the soil and subject to corrosion are protected from external corrosion by one of the following:</p> <ul style="list-style-type: none"> <li>- corrosion resistant materials</li> <li>- a cathodic protection system.</li> </ul> <p>Verify that the piping system is isolated from, or protected against, sources of stray electric current which include underground cables, electric machinery, railroad systems, and electrical grounding rods.</p> <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p>storage systems must meet labeling standards (6 NYCRR 599.13(c)(4)) [Added January 1998; Revised March 2010].</p>   | <p>(NOTE: As of 13 February 1995 all new piping systems or additions or replacements to parts of existing storage tanks systems must be constructed, designed, and installed in accordance with the following requirements.)</p> <p>(NOTE: New piping systems must continue to meet all the requirements for existing storage tank systems.)</p> <p>Verify that new aboveground piping systems bear a stencil, label, or plate that contains the chemical name or common name if the chemical name is not appropriate, for the substance stored.</p> <p>Verify that the stencil, label or plate is located at all valves, pumps, switches, and on each side of any wall where piping enters or exits.</p> <p>Verify that at least one conspicuously visible label is provided at each end of the piping.</p>   |
| <p><b>ST.155.35.NY.</b> New piping in hazardous substance storage systems must meet leak detection standards (6 NYCRR 599.15) [Added January 1998; Revised March 2010].</p>        | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>(NOTE: New piping systems must continue to meet all the requirements for existing storage tank systems.)</p> <p>Verify that new on-ground or underground piping that conveys hazardous substances under pressure is equipped with an automatic line leak detector which alerts the operator to the presence of a leak by restricting or shutting off the flow of hazardous substances through the piping or by triggering an audible or visual alarm.</p>   |
| <p><b>ST.155.36.NY.</b> New piping in hazardous substance storage systems must meet secondary containment standards (6 NYCRR 599.14) [Added January 1998; Revised March 2010].</p> | <p>(NOTE: See ST.155.1.NY. for applicability and exemptions.)</p> <p>(NOTE: As of 13 February 1995 all new piping systems or additions or replacements to parts of existing storage tanks systems must be constructed, designed, and installed in accordance with the following requirements.)</p> <p>(NOTE: New piping systems must continue to meet all the requirements for existing storage tank systems.)</p> <p>Verify that new on-ground and underground piping systems have a secondary containment system that detects leakage and prevents releases, spills, or accumulated liquids from entering the environment.</p> <p>Verify that the secondary containment system is placed on a foundation that prevents failure due to settlement, compression, or uplift.</p> <p>Verify that spilled or leaked substances are removed from the secondary</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
|   | <p>containment system within 24 h.</p> <p>Verify that, if it is demonstrated that removal of the spilled or leaked substance, or accumulated precipitation cannot be accomplished within 24 h, it is removed in as timely a manner as possible to prevent harm to human health and the environment.</p> <p>Verify that the secondary containment system consists of one of the following:</p> <ul style="list-style-type: none"> <li>- double-walled piping</li> <li>- a synthetic trench liner</li> <li>- another comparable system or practice.</li> </ul> <p>Verify that, if the secondary containment system consists of double-walled piping, the piping meets the following requirements:</p> <ul style="list-style-type: none"> <li>- the outer walls are protected from corrosion</li> <li>- the outer jacket encloses the entire primary piping system</li> <li>- the jacket allows for monitoring of leaks and safe venting of vapors.</li> </ul> <p>Verify that, if a synthetic liner is used for secondary containment, it meets the following requirements:</p> <ul style="list-style-type: none"> <li>- the liner entirely encloses and encapsulates the piping system</li> <li>- punctures, tears, or inadequate seams in the liner are repaired prior to backfilling</li> <li>- the liner is installed with a slope of at least 0.25 in./ft that channels any leaked product to a sump or other suitable receiver.</li> </ul> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>   |
| <p><b>ST.160.</b></p> <p><b>STORAGE TANK DISPOSAL</b></p> <p><b>ST.160.1.NY.</b> Used storage tanks that are to be disposed of as junk must be disposed of properly (6 NYCRR 613.9(d)(3)) [Citation Revised March 2008].</p> | <p>(NOTE: The requirements of this section also apply to Used Oil ASTs.)</p> <p>Verify that, if a used tank is to be disposed of as junk, it is retested for petroleum vapors, rendered vapor-free if necessary, and punched with holes to make it unfit for storage of liquids.</p> <p>(NOTE: Used tanks may not be reused for petroleum storage unless they meet new tank standards and are thoroughly cleaned and inspected.)</p> |

## SECTION 11

### TOXIC SUBSTANCES MANAGEMENT

#### New York Supplement, March 2010

This section covers the state requirements for Toxic Substances Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Abatement* - Any portion of an asbestos project that includes procedures to control fiber release from asbestos containing material. This includes removal, encapsulation, enclosure, repair, or handling of asbestos material that may result in the release of asbestos fiber (Title 12, New York Code of Rules and Regulations, Section 56-2.1 (12 NYCRR 56-2.1)) [Added March 2007].
- *Accepted Methods/Methodologies* - Procedures, regulations, or standards, which are published by recognized standards organizations (e.g. NIOSH, ASTM, ANSI), or are included within federal, state or local governmental regulations (e.g. OSHA, USEPA) (12 NYCRR 56-2.1) [Added March 2007].
- *Active Project* - A project becomes active when construction of the personal decontamination unit is required to be commenced, or when ACM, PACM or asbestos material is disturbed, whichever comes first, and is considered active until completion of Phase IID, unless, in response to a written request, permission is granted by the Department of Labor Engineering Services Unit to suspend the work on the project for a specified time period (12 NYCRR 56-2.1) [Added March 2007].
- *Additional Contractual Work* - Additional asbestos abatement work not originally included within the NYS DOL asbestos project notification (12 NYCRR 56-2.1) [Added March 2007].
- *Agricultural Building/Structure* - A building/structure which is or was used exclusively for agricultural or horticultural activity. This definition does not include converted structures or buildings currently used for residential purposes or the processing or retail merchandising of agricultural or horticultural commodities (12 NYCRR 56-2.1) [Added March 2007].
- *Airlock* - A system for permitting entrance and exit, while restricting air movement, between a contaminated area and an uncontaminated area (12 NYCRR 56-2.1) [Added March 2007].
- *Air Sampling* - The process of measuring the fiber content of a known volume of air collected during a specific period of time, using accepted methodologies (12 NYCRR 56-2.1) [Added March 2007].
- *Ambient Air Sampling* - A method of sampling by which an air sample is collected outside the regulated abatement work area, and is collected without the use of aggressive air sampling techniques (12 NYCRR 56-2.1) [Added March 2007].
- *Amended Water* - Water to which a surfactant has been added (12 NYCRR 56-2.1) [Added March 2007].
- *Approved Asbestos Safety Training Program* - A program, approved by the New York State Commissioner of Health, providing training in the various disciplines that may be involved in an asbestos project (12 NYCRR 56-2.1) [Added March 2007].

- *Asbestos* - Any naturally occurring hydrated mineral silicate separable into commercially usable fibers, including chrysotile (serpentine), amosite (cummingtonite-grunerite), crocidolite (riebeckite), tremolite, anthophyllite and actinolite (12 NYCRR 56-2.1) [Added March 2007].
- *Asbestos Abatement Contractor* - An asbestos contractor who performs abatement during an asbestos project or employs persons performing such abatement (12 NYCRR 56-2.1) [Added March 2007].
- *Asbestos Abatement Contractor Daily Project Log* - A bound daily narrative journal maintained by the asbestos abatement contractor, which contains a synopsis of all pertinent events that occur throughout Phase II of the asbestos project (12 NYCRR 56-2.1) [Added March 2007].
- *Asbestos Containing Material (ACM)* - Any material containing greater than one percent (1 percent) of asbestos, also known as Asbestos Material (12 NYCRR 56-2.1) [Added March 2007].
- *Asbestos Contractor* - The State, any political subdivision of the State, a public authority or any other governmental agency or instrumentality thereof, self-employed person, company, unincorporated association, firm, partnership or corporation and any owner or operator thereof, which engages in any portion of an asbestos project, or employs persons engaged in any portion of an asbestos project. Exception: Property owners or prime contractors who hire asbestos contractors, but do not, themselves, direct or control the work (12 NYCRR 56-2.1) [Added March 2007].
- *Asbestos Control Bureau* - Asbestos Control Bureau, Division of Safety and Health, New York State Department of Labor (12 NYCRR 56-2.1) [Added March 2007].
- *Asbestos Handler (Worker)* - Any person who performs the duties described in Section 56.3.2(d)(1) of this Part (12 NYCRR 56-2.1) [Added March 2007].
- *Asbestos Handling Certificate* - A certificate issued by the Commissioner in any of the categories set forth in Section 56-3.2(d) of this Part (12 NYCRR 56-2.1) [Added March 2007].
- *Asbestos Handling License* - A license issued by the Commissioner pursuant to Section 56-3.1 of this Part (12 NYCRR 56-2.1) [Added March 2007].
- *Asbestos Material* - Any material containing greater than one percent (1 percent) of asbestos, also known as Asbestos Containing Material (ACM) (12 NYCRR 56-2.1) [Added March 2007].
- *Asbestos Project* - Work that involves the removal, encapsulation, enclosure, repair or disturbance of friable or non-friable asbestos, or any handling of asbestos material that may result in the release of asbestos fibers. For the purpose of compliance with this Part, an asbestos project shall include any disturbance of asbestos fibers, and the planning, asbestos survey (as per Subpart 56-5.1), design, background air sampling, inspection, air sampling and oversight of abatement work, cleanup, and the handling of all asbestos material subject to abatement, as well as the supervising of such activities. Installation of friable ACM shall also be considered an asbestos project. An asbestos project starts with Phase I when the planning, asbestos survey, and design work begins or is required to begin. The project shall not be considered completed until Phase II D is complete. (See Table 1 Below) (12 NYCRR 56-2.1) [Added March 2007].

**Table 1**  
**ASBESTOS PROJECT PHASES OF WORK**

| <b>Phase I</b>   |                         | <b>Phase II</b>   |   |  |                               |
|--|-------------------------|---|---|--|-------------------------------|
| <b>(Prior to Asbestos Abatement Contractor Mobilization)<br/>Pre-Abatement</b> |                         | <b>Start-----Abatement-----End</b>                                    |   |  |                               |
| <b>A</b>   | <b>B</b>                | <b>A</b>  | <b>B</b>  | <b>C</b>                               | <b>D</b>                      |
| Asbestos Survey, Planning & Design   | Background Air Sampling | Regulated Abatement Work Area(s) Preparation & Enclosure Construction | Asbestos Handling including, Gross Removal or Abatement, Initial Cleans and Waste Removal | Final Cleaning & Clearance Air Samples | Final Waste Removal From Site |
| <b>Start-----Asbestos Project-----End</b>                                      |                         |   |   |  |                               |

- (1) Where any work is subcontracted, only that part of the work involving asbestos shall be deemed to be an asbestos project.
  - (2) Asbestos projects include Large asbestos projects, Small asbestos projects, Minor asbestos projects, incidental disturbance asbestos projects and emergency projects as defined elsewhere in this Part. For purposes of licensing, certification, notification, air sampling and asbestos survey requirements, asbestos projects shall include in-plant operations.
  - (i) Large asbestos project. An asbestos project involving the removal, disturbance, enclosure, encapsulation, repair or handling of 160 square feet or more of ACM, PACM or asbestos material or 260 linear feet or more of ACM, PACM or asbestos material.  
 Small asbestos project. An asbestos project involving the removal, encapsulation, enclosure, repair, disturbance or any handling of more than 10 and less than 160 square feet of ACM, PACM or asbestos material or more than 25 and less than 260 linear feet of ACM, PACM or asbestos material.
  - (iii) Minor asbestos project. An asbestos project involving the removal, disturbance, repair, encapsulation, enclosure or handling of 10 square feet or less of ACM, PACM or asbestos material, or 25 linear feet or less of ACM, PACM or asbestos material.
- *Asbestos Project Air Sampling Technician* - An individual who performs the duties described in Section 56-3.2(d)(3) of this Part (12 NYCRR 56-2.1) [Added March 2007].
  - *Asbestos Survey* - A thorough inspection for and identification of all PACM, suspect ACM, or asbestos material throughout the building/structure or portion thereof to be demolished, renovated, remodeled, or repaired. (See Subpart 56-5) (12 NYCRR 56-2.1) [Added March 2007].
  - *Asbestos Waste* - ACM, PACM, asbestos material or asbestos contaminated objects requiring disposal pursuant to applicable laws or regulations. This includes RACM as well as Category I and II Non-Friable ACM (12 NYCRR 56-2.1) [Added March 2007].
  - *Authorized Visitor* - Any party on an asbestos project, who has to enter the asbestos project restricted area or regulated abatement work area for emergency purposes or regulatory compliance inspections. Examples include the building/structure owner, his or her agent or representative, utility company representatives, the Commissioner or his or her agents, and personnel of any regulatory agency having jurisdiction over the project. Visitors shall comply with all applicable requirements of OSHA 29 CFR 1926 (12 NYCRR 56-2.1) [Added March 2007].

- *Background Air Sampling* - A method used to determine airborne fiber concentrations in the area where abatement work is to be conducted, prior to starting Phase II A of the asbestos project (12 NYCRR 56-2.1) [Added March 2007].
- *Barriers* - Critical Barriers and Isolation Barriers (12 NYCRR 56-2.1) [Added March 2007].
- *Building/Structure* - A structure wholly or partially enclosed within exterior walls and a roof, intended to afford shelter to persons, animals or property; or a structure used as a conveyance for utilities, vehicular traffic or pedestrians (e.g. bridge, tunnel, manhole, subsurface conduits) (12 NYCRR 56-2.1) [Added March 2007].
- *Building/Structure Owner* - The State, any political subdivision of the State, a public authority or any other governmental agency or instrumentality thereof, person, company, unincorporated association, firm, partnership or corporation in whom legal title to the premises is vested unless the premises are held in land trust, in which instance building/structure owner means the person in whom beneficial title is vested (12 NYCRR 56-2.1) [Added March 2007].
- *Building/Structure Owner's Authorized Representative* - A licensed asbestos contractor firm contractually responsible for execution of any building owner's responsibility, as required by this Part, during any phase of an asbestos project at the building owner's building/structure (12 NYCRR 56-2.1) [Added March 2007].
- *Bulk Sampling* - Accepted methods for collecting samples of suspect materials for appropriate analyses by NYS ELAP approved laboratories, to determine asbestos content (12 NYCRR 56-2.1) [Added March 2007].
- *Category I Non-Friable ACM* - NESHAP classification-Asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products, containing more than one percent (1 percent) asbestos, that when dry, can not be crumbled, pulverized, or reduced to powder by hand pressure (12 NYCRR 56-2.1) [Added March 2007].
- *Category II Non-Friable ACM* - NESHAP classification-Any material, excluding Category I Non-Friable ACM, containing more than one percent (1 percent) asbestos, that when dry, can not be crumbled, pulverized, or reduced to powder by hand pressure (12 NYCRR 56-2.1) [Added March 2007].
- *Class I Asbestos Work* - OSHA term meaning activities involving the abatement of Thermal Systems Insulation (TSI), and surfacing ACM and PACM (12 NYCRR 56-2.1) [Added March 2007].
- *Class II Asbestos Work* - OSHA term meaning activities involving the abatement of ACM which is not TSI or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics (12 NYCRR 56-2.1) [Added March 2007].
- *Class III Asbestos Work* - OSHA term meaning Repair and Maintenance operations, where no more than a minor quantity of ACM, including TSI and surfacing ACM and PACM, is likely to be disturbed (12 NYCRR 56-2.1) [Added March 2007].
- *Class IV Asbestos Work* - OSHA term meaning Maintenance and Custodial Activities during which employees contact but do not disturb ACM or PACM and activities to clean up non-ACM dust, waste and debris resulting from Class I, II and III activities (12 NYCRR 56-2.1) [Added March 2007].
- *Clean Room* - An uncontaminated area or room, which is a part of the personal decontamination enclosure, with provisions for storage and changing of persons' street clothes and protective equipment (12 NYCRR 56-2.1) [Added March 2007].
- *Cleanup* - The utilization of HEPA-vacuuming or wet cleaning or both to control and eliminate accumulations of asbestos material and asbestos waste material (12 NYCRR 56-2.1) [Added March 2007].



- *Commissioner* - The Commissioner of the New York State Department of Labor (12 NYCRR 56-2.1) [Added March 2007].
- *Containment* - The negative-pressurized enclosure within the restricted area, which establishes the regulated abatement work area and surrounds the location where the asbestos abatement is actually taking place (12 NYCRR 56-2.1) [Added March 2007].
- *Decontamination System Enclosure* - A series of connected rooms, usually attached to the regulated abatement work area, for the decontamination of persons, materials and equipment (12 NYCRR 56-2.1) [Added March 2007].
- *Demolition* - The wrecking or removal of any load-supporting structural member of a building or structure (12 NYCRR 56-2.1) [Added March 2007].
- *Department* - The New York State Department of Labor (12 NYCRR 56-2.1) [Added March 2007].
- *Disturbance* - Any activities that disrupt the matrix of ACM or PACM, or generate debris, visible emissions or airborne asbestos fibers from ACM or PACM. This includes moving of friable asbestos containing material from one place to another (12 NYCRR 56-2.1) [Added March 2007].
- *Emergency* - An unexpected, unanticipated or unforeseen occurrence, including but not limited to, a steam, chemical, gas or water line rupture, a boiler failure, a building/structure collapse, or act of nature which may pose (12 NYCRR 56-2.1) [Added March 2007]:
  - (1) an imminent danger to the health and safety of the public; or
  - (2) an asbestos-related risk to the health and safety of the public from release of asbestos fibers.
- *Emergency Asbestos Project* - An asbestos project which is necessary to respond to an emergency (12 NYCRR 56-2.1) [Added March 2007].
- *Encapsulant (Sealant) or Encapsulating Agent* - A liquid material, which can be applied to asbestos material and which prevents the release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding its components together and to the substrate (penetrating encapsulant). See Sealant (12 NYCRR 56-2.1) [Added March 2007].
- *Encapsulation* - Abatement consisting of the coating or spraying of asbestos material with an encapsulant (sealant) or encapsulating agent (12 NYCRR 56-2.1) [Added March 2007].
- *Enclosure* - Abatement consisting of the construction of airtight walls, ceilings and floors between the asbestos material and the building/structure environment, or around surfaces coated with asbestos material, or any other appropriate procedure as determined by the Department, which prevents the release of asbestos fibers (12 NYCRR 56-2.1) [Added March 2007].
- *EPA* - The United States Environmental Protection Agency (12 NYCRR 56-2.1) [Added March 2007].
- *Equipment Room* - A contained area or room which is part of the personal decontamination system enclosure with provisions for the storage of contaminated clothing and equipment (12 NYCRR 56-2.1) [Added March 2007].
- *Fiber (Asbestos Fiber)* - Generally, a slender or elongated structure, which results from the break up of ACM, PACM or asbestos material. However, the definition of an asbestos fiber is also dependent upon the approved accepted method of air sampling and analysis utilized for the specific phase of the asbestos project (12 NYCRR 56-2.1) [Added March 2007].
- *Fixed Object* - Equipment, furniture or other item that is affixed, as a whole, to a floor, ceiling, wall or other building structure or system (12 NYCRR 56-2.1) [Added March 2007].

- *Friable* - Any material that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure, or is capable of being released into the air by hand pressure (12 NYCRR 56-2.1) [Added March 2007].
- *Glovebag* - A manufactured impervious bag-like enclosure constructed of at least six (6) mil transparent plastic, seamless at the bottom, with inward-projecting long sleeve glove(s), which may also contain an inward-projecting water-wand sleeve, an internal tool pouch, and an attached, labeled receptacle or portion for asbestos waste. The glovebag is constructed and installed to surround the object or area to be decontaminated and contain all asbestos fibers released during the abatement process (12 NYCRR 56-2.1) [Added March 2007].
- *Glovebag Technique* - A method for removing asbestos material from heating, ventilating, and air conditioning (HVAC) ducts, piping runs, valves, joints and elbows, and other non-planar surfaces, by use of a glovebag (12 NYCRR 56-2.1) [Added March 2007].
- *Glue* - A material used as an adhesive, such as the material used to hold tiles to a surface. See Mastic (12 NYCRR 56-2.1) [Added March 2007].
- *HEPA-Filter* - A high efficiency particulate air filter capable of trapping and retaining 99.97 percent of all mono-dispersed particles of 0.3 microns in diameter or larger (12 NYCRR 56-2.1) [Added March 2007].
- *HEPA-Vacuum Equipment* - Vacuuming equipment designed for abatement, with a high efficiency particulate air filtration system (12 NYCRR 56-2.1) [Added March 2007].
- *Holding Area* - A chamber in the waste decontamination enclosure utilized for temporary storage of containerized ACM waste, prior to transfer to waste transport vehicle (12 NYCRR 56-2.1) [Added March 2007].
- *Incidental Disturbance* - The unintentional disturbance of, ACM, PACM, or asbestos material (12 NYCRR 56-2.1) [Added March 2007].
- *Incidental Disturbance Asbestos Project* - The cleanup, repair or encapsulation of less than 10 square feet or less than 25 linear feet of incidentally disturbed ACM, PACM or asbestos material (12 NYCRR 56-2.1) [Added March 2007].
- *Inspector* - Any person who performs the duties described at Section 56-3.2(d)(4) of this Part (12 NYCRR 56-2.1) [Added March 2007].
- *Intact* - Asbestos material that has not crumbled, been pulverized, or otherwise been damaged or disturbed, and the material's matrix has not noticeably deteriorated (12 NYCRR 56-2.1) [Added March 2007].
- *Intermediate Portions of a Project* - The discrete abatement segments that will take place where non-continuous interim notifications are required, as per Section 56-3.4(b)(4)(v), for large asbestos projects (12 NYCRR 56-2.1) [Added March 2007].
- *Isolation Barriers* - Installed temporary hardwall barriers that complete the containment enclosure and establish the regulated abatement work area (12 NYCRR 56-2.1) [Added March 2007].
- *Lockdown Encapsulant* - A thinned out bridging encapsulant used for lockdown purposes to assist with cleanup as per this Part (12 NYCRR 56-2.1) [Added March 2007].
- *Management Planner* - Any person who performs the duties described at Section 56-3.2 (d) (9) of this Part (12 NYCRR 56-2.1) [Added March 2007].
- *Mastic* - A pasty material used as an adhesive (12 NYCRR 56-2.1) [Added March 2007].

- *Mounted Object* - Equipment, furniture, or other item that is attached, in whole or in part, to a floor, ceiling, wall or other building structure or system or to a fixed object (12 NYCRR 56-2.1) [Added March 2007].
- *Movable Object* - Equipment, furniture or other item that is not attached or affixed, in whole or in part, to a floor, ceiling, wall or other building structure or system or to a fixed object (12 NYCRR 56-2.1) [Added March 2007].
- *Multi-employer Work Sites* - Any demolition, renovation, remodeling or repair project work site, which includes work covered by this part, where more than one employer is reasonably expected to be on-site during the project (12 NYCRR 56-2.1) [Added March 2007].
- *Multiple Abatement* - The abatement of more than one type of ACM within the same containment (12 NYCRR 56-2.1) [Added March 2007].
- *Negative Air Pressure Equipment* - A local exhaust system, capable of maintaining air pressure within a containment at a lower pressure than the air pressure outside of such containment, and which provides for HEPA filtration of all air exhausted from the containment (12 NYCRR 56-2.1) [Added March 2007].
- *NESHAP* - National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) (12 NYCRR 56-2.1) [Added March 2007].
- *NIOSH* - The National Institute for Occupational Safety and Health (12 NYCRR 56-2.1) [Added March 2007].
- *Non-Asbestos Material* - Any material documented to contain one percent (1 percent) or less of asbestos (12 NYCRR 56-2.1) [Added March 2007].
- *Non-Friable* - Any material that when dry, can not be crumbled, pulverized, or reduced to powder by hand pressure, and is not capable of being released into the air by hand pressure (12 NYCRR 56-2.1) [Added March 2007].
- *Non-Friable Organically Bound (NOB) Asbestos Material* - Non-friable asbestos materials embedded in flexible-to-rigid asphalt or vinyl matrices, including but not limited to flooring materials, adhesives, mastics, asphalt shingles, roofing materials and caulks (12 NYCRR 56-2.1) [Added March 2007].
- *Occupied Area* - Any frequented portion of the work site where abatement is not taking place (12 NYCRR 56-2.1) [Added March 2007].
- *Operations and Maintenance Worker* - Any person who performs the duties described at Section 56-3.2 (d) (5) of this Part (12 NYCRR 56-2.1) [Added March 2007].
- *OSHA* - The Occupational Safety and Health Administration (12 NYCRR 56-2.1) [Added March 2007].
- *Outside Air* - The air immediately outside the building or structure in which an asbestos project is performed (12 NYCRR 56-2.1) [Added March 2007].
- *Person* - Any natural person (12 NYCRR 56-2.1) [Added March 2007].
- *Personal Air Sampling* - Air sampling located in a worker's breathing zone (12 NYCRR 56-2.1) [Added March 2007].
- *Personal Decontamination System Enclosure* - An area designated for controlled passage of all persons to and from the regulated abatement work area (12 NYCRR 56-2.1) [Added March 2007].

- *Personal Protective Equipment (PPE)* - Disposable work suits or coveralls, head covering, eye protection, footwear, gloves and appropriate NIOSH-approved respirators with appropriate NIOSH-approved filters (12 NYCRR 56-2.1) [Added March 2007].
- *Plasticize* - To cover floors, walls, ceilings or other surfaces with 6-mil fire-retardant plastic sheeting (12 NYCRR 56-2.1) [Added March 2007].
- *Presumed Asbestos Containing Material (PACM)* - All Thermal System Insulations and Surfacing Materials found in buildings constructed no later than 1980. PACM is considered to be ACM unless proven otherwise by appropriate bulk sampling and laboratory analyses (12 NYCRR 56-2.1) [Added March 2007].
- *Project Air Sampling* - Area air sampling conducted in accordance with Subpart 56-4 of this Part during the course of the asbestos project (12 NYCRR 56-2.1) [Added March 2007].
- *Project Designer* - Any person who performs the duties described at Section 56-3.2(d)(7) of this Part (12 NYCRR 56-2.1) [Added March 2007].
- *Project Monitor* - Any person who performs the duties described at Section 56-3.2(d)(8) (12 NYCRR 56-2.1) [Added March 2007].
- *Public* - Any natural person except (12 NYCRR 56-2.1) [Added March 2007]:
  - (1) A person engaged in an asbestos project
  - (2) An authorized visitor
  - (3) Police, fire, or other public safety personnel.
- *Receptor* - Any opening, which could admit asbestos fibers into a structure if not properly protected. Examples include but are not limited to operable windows, doors, vents, air intakes or exhausts of any mechanical device within a building or structure (12 NYCRR 56-2.1) [Added March 2007].
- *Regulated Abatement Work Area* - The portion of the restricted area where abatement work actually occurs. For tent work areas, the interior of each tent is a regulated abatement work area. For OSHA Class I and Class II asbestos abatement, the interior of the restricted area containment enclosure is the regulated abatement work area. For exterior non-friable asbestos abatement conducted without the establishment of negative air ventilation systems or containment enclosures, the entire restricted area surrounding the abatement location is considered to be the regulated abatement work area (12 NYCRR 56-2.1) [Added March 2007].
- *Regulated Asbestos-Containing Material (RACM)* - Friable ACM or PACM, Category I Non-friable ACM that has become friable or has been or will be subjected to sanding, grinding, cutting or abrading, or Category II Non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations (12 NYCRR 56-2.1) [Added March 2007].
- *Remodel* - For purposes of this code, remodel shall mean the same as renovation (12 NYCRR 56-2.1) [Added March 2007].
- *Remote Decontamination System Enclosure* - Decontamination systems that are not attached to the regulated abatement work area but are within the work site (12 NYCRR 56-2.1) [Added March 2007].
- *Removal* - Abatement, consisting of operations where ACM, PACM or asbestos material is removed or stripped from structures or substrates. This includes demolition operations (12 NYCRR 56-2.1) [Added March 2007].
- *Renovation* - The altering of an existing building/structure, or a portion of building/structure components or systems, including the stripping, removal or abatement of ACM from a building or structure. Operations in which load-supporting structural members are wrecked or taken out are demolitions (12 NYCRR 56-2.1) [Added March 2007].

- *Repair (Asbestos)* - Abatement, consisting of corrective action for a Minor Asbestos Project using required work practices to control fiber release from damaged ACM, PACM or asbestos material (12 NYCRR 56-2.1) [Added March 2007].
- *Repair* - The replacement, overhaul, rebuilding, reconstructing or reconditioning of any part of a building/structure component or system with like or similar material or parts, due to damage or excessive wear (12 NYCRR 56-2.1) [Added March 2007].
- *Respiratory Protection* - NIOSH-approved respirators with appropriate NIOSH-approved filters (12 NYCRR 56-2.1) [Added March 2007].
- *Restricted Area* - A restricted area established and marked for the abatement portion of an asbestos project. This area shall include, but not be limited to asbestos project regulated abatement work areas and any contiguous decontamination facilities, adjoining staging areas where work materials, debris or waste from such work may accumulate, remote decontamination areas, and waste storage areas (dumpsters, trailers, etc.) (12 NYCRR 56-2.1) [Added March 2007].
- *Restricted Asbestos Handler (Allied Trades)* - Any person who performs the duties described at Section 56-3.2 (d) (2) of this Part (12 NYCRR 56-2.1) [Added March 2007].
- *Sequential Abatement* - The abatement of different types of asbestos containing material within a common regulated abatement work area in a priority order. (See Section 56-8.6) (12 NYCRR 56-2.1) [Added March 2007].
- *Supervisor* - Any person who performs the duties described at Section 56-3.2 (d) (6) of this Part (12 NYCRR 56-2.1) [Added March 2007].
- *Suspect Miscellaneous ACM* - Any suspect asbestos-containing material that is not PACM, such as floor tiles, ceiling tiles, mastics/adhesives, sealants, roofing materials, cementitious materials, etc. A listing of typical suspect miscellaneous ACM can be found in Subpart 56-5. All suspect miscellaneous ACM must be assumed to be ACM, unless proven otherwise by appropriate bulk sampling and laboratory analyses (12 NYCRR 56-2.1) [Added March 2007].
- *Surfacing Material* - Material that is sprayed-on, troweled-on, or otherwise applied to surfaces (such as acoustical or finish plaster on ceilings and walls, and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes) (12 NYCRR 56-2.1) [Added March 2007].
- *Variance (Site-specific)* - Relief in accordance with Section 30 of the Labor Law from specific sections of Industrial Code Rule 56 for a specific project (12 NYCRR 56-2.1) [Added March 2007].
- *Variance (Applicable) (AV)* - Blanket relief in accordance with Section 30 of the Labor Law from specific sections of Industrial Code Rule 56 for a particular type of project (12 NYCRR 56-2.1) [Added March 2007].
- *Visible Emission* - Any emission of particulate material that can be seen without the aid of instruments (12 NYCRR 56-2.1) [Added March 2007].
- *Washroom* - A room between the regulated abatement work area and the holding area in the waste decontamination system enclosure, where equipment and waste containers are wet cleaned or HEPA-vacuumed (12 NYCRR 56-2.1) [Added March 2007].
- *Work Site* - Building, structure, parcel of land or premises where an asbestos project takes place (12 NYCRR 56-2.1) [Added March 2007].

**TOXIC SUBSTANCES MANAGEMENT  
GUIDANCE FOR NEW YORK CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

**PCB Management**

Many types of PCBs and PCB equipment are regulated as hazardous wastes in New York. See the Hazardous Waste Management section for details.

Missing Checklist Items T1.2.1.NY.

**Asbestos Management**

State Requirements T2.1.1.NY.

Missing Checklist Items T2.2.1.NY.

Renovation and Demolition T2.5.1.NY. through T2.5.7.NY.

Personnel Training T2.10.1.NY.

Asbestos Disposal T2.15.1.NY.

**Radon Management**

Refer to the U.S. TEAM Guide and the DOD Component Supplements for DOD and service-specific requirements.

Missing Checklist Items T3.2.1.NY.

**Lead-Based Paint Management**

Refer to the U.S. TEAM Guide and the DOD Component Supplements for DOD and service-specific requirements.

Missing Checklist Items T4.2.1.NY.

| <b>COMPLIANCE CATEGORY:</b><br><b>TOXIC SUBSTANCE MANAGEMENT</b><br><b>New York Supplement</b>  |   |
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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>PCB</b></p> <p><b>T1.2.</b><br/><b>Missing Checklist Items</b></p> <p><b>T1.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

| <b>COMPLIANCE CATEGORY:</b><br><b>TOXIC SUBSTANCE MANAGEMENT</b><br><b>New York Supplement</b>  |  |
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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>   |
| <b>ASBESTOS MANAGEMENT</b><br><br><b>T2.1.</b><br><b>All Facilities</b><br><br><b>T2.1.1.NY.</b> Property owners are required to contract with licensed asbestos contractors in cases of incidental disturbance of asbestos (12 NYCRR 56-1.5) [Added March 2007]. | <p>Verify that, if there is an incidental disturbance or other disturbance (not as part of a controlled asbestos project) of ACM, PACM, asbestos material, or suspect miscellaneous ACM assumed to be ACM at a building or structure, upon discovery of the disturbance, the property owner contracts with a licensed asbestos contractor for immediate isolation of the disturbance and cleanup in accordance with all provisions of this Part.</p> |



| <b>COMPLIANCE CATEGORY:</b><br><b>TOXIC SUBSTANCE MANAGEMENT</b><br><b>New York Supplement</b>  |   |
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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <b>ASBESTOS MANAGEMENT</b><br><br><b>T2.2.</b><br><b>Missing Checklist Items</b><br><br><b>T2.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |



**COMPLIANCE CATEGORY:  
TOXIC SUBSTANCE MANAGEMENT  
New York Supplement**

| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
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| <p><b>T2.5.3.NY.</b> Asbestos projects must meet notification requirements (12 NYCRR 56-3.4(b) and 56.3-5) [Added January 1998; Revised March 2007].</p> | <p>Verify that any asbestos abatement contractor who proposes to engage in a Large asbestos project notifies in writing, the Asbestos Control Bureau.</p> <p>Verify that the notice is received at least ten (10) calendar days prior to commencement of Phase II A of the asbestos project unless waived in writing by the Commissioner or his or her duly authorized representative.</p> <p>(NOTE: If an asbestos hazard is present which requires immediate attention, or if emergency conditions make it impossible to give notification ten (10) calendar days prior to commencement of the project:</p> <ul style="list-style-type: none"> <li>- prior to the commencement of an asbestos project that is necessary to respond to an emergency, or to cleanup an incidental disturbance, the asbestos abatement contractor contacts the Asbestos Control Bureau via telephone or in person to request permission to proceed with the asbestos project</li> <li>- if permission to proceed with an emergency asbestos project is granted, the asbestos abatement contractor to whom such permission is granted, within three (3) business days, files the written notifications required above.)</li> </ul> <p>Verify that the notification to the Asbestos Control Bureau is made on a form or forms provided by the Commissioner and includes the following:</p> <ul style="list-style-type: none"> <li>- the name, address and asbestos license number of the asbestos abatement contractor and all sub-contractors retained for the asbestos project</li> <li>- the name and address of the party for whom the asbestos project is being performed, as well as the contract amount</li> <li>- the address and description of the building/structure or area, including size, age, use and prior use of the building/structure or area</li> <li>- the name and phone number of the building/structure or area owner representative or site contact individual</li> <li>- the amount of ACM, PACM or asbestos material present in square feet and/or linear feet, if applicable (piping, fittings and associated insulation (excluding breeching and large (2 foot or greater) diameter piping/fittings/associated insulation) are to be measured in linear feet)</li> <li>- room designation numbers or other local information where ACM, PACM or asbestos material is found, unless such material is found throughout the entire building or structure</li> <li>- the commencement and completion dates for the asbestos project, Phase II A through D, and the commencement and completion dates of any intermediate portions of the project (night, weekend and shift work schedules will be included)</li> <li>- the procedures and equipment, including ventilating/exhaust systems, that will be employed</li> <li>- a listing of all variances (applicable and site-specific) to be utilized on the asbestos project</li> <li>- the name and asbestos license number of the air sampling asbestos contractor for the asbestos project</li> <li>- the name and NYS ELAP registration number of the laboratory which will perform analysis of project air samples for the project</li> <li>- the name, address, phone number and NYS DEC permit number of the waste</li> </ul> |

| <b>COMPLIANCE CATEGORY:<br/>TOXIC SUBSTANCE MANAGEMENT<br/>New York Supplement</b>         |   |
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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
|  | <p>transporter</p> <ul style="list-style-type: none"> <li>- the name, address and phone number of the landfill where the asbestos waste will be transported</li> <li>- any other information which the Commissioner may require.</li> </ul> <p>Verify that a separate notification is submitted for each period of up to twelve (12) months during which work is performed.</p> <p>Verify that, whenever the commencement date of a project for which notification has already been submitted is postponed, or if a project for which a notification has been submitted is cancelled, or if a project completion date is changed, the asbestos abatement contractor notifies the Asbestos Control Bureau of the postponement or cancellation or change of completion date by telephone or written notice, and that:</p> <ul style="list-style-type: none"> <li>- this notice is received at least one (1) calendar day prior to the initial start or completion date set forth on the previously submitted notification</li> <li>- addition, written notification for new start dates on projects postponed for one (1) week or longer are received at least three (3) calendar days prior to the new start date</li> <li>- notice of postponement or cancellation given by telephone is followed by written confirmation of the postponement or cancellation, which will be provided to the Asbestos Control Bureau within three (3) business days of the telephone notice.</li> </ul> <p>(NOTE: Within a non-continuous notification for a Large asbestos project, intermediate portions of a project require notice to the Asbestos Control Bureau by telephone at least ten (10) calendar days prior to commencement of the intermediate portion of the project, followed by written notification with the commencement and completion dates of any intermediate portions of the project. The written notification will be provided to the Asbestos Control Bureau within three (3) business days of the telephone notice.)</p> <p>(NOTE: Each building or structure will be considered a separate project for the purpose of meeting all notification requirements set forth in the statute and this Part. A separate project notification form and fee will be submitted for each building/structure. Where one contract is entered into for several component projects, notification is required. Similarly, separate bids for component projects do not void the notification requirement.)</p> |
| <b>T2.5.4.NY.</b> [Deleted March 2007].  | (NOTE: See T2.5.3.NY. for notification requirements for emergency asbestos responses.)  |
| <b>T2.5.5.NY.</b> Residential and business occupants must be notified of asbestos projects | (NOTE: The property owner and asbestos abatement contractor are responsible for ensuring that notice is provided to residential and business occupants. This notice may be provided by the property owner or by the asbestos abatement  |

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| (12 NYCRR 56-3.6)) [Added January 1998; Revised March 2007]. | <p>contractor or subcontractor engaged in the Phase II abatement portion of a project.)</p> <p>Verify that a written notice is posted or otherwise provided to residential and business occupants of the building/structure, including visitors to the building/structure, 10 calendar days prior to the commencement of Phase II A work on any asbestos project within the building/structure.</p> <p>(NOTE: For projects being conducted in school buildings, the faculty, staff and students attending such school and visitors to the school will be considered to be business occupants and shall receive notice as required in this Part.)</p> <p>Verify that the written notice is:</p> <ul style="list-style-type: none"> <li>- given to those business and residential occupants of a building/structure, or portion thereof, who are located on the floor or floors where the actual project is to be conducted, and one floor above and one floor below the floor or floors containing the project</li> <li>- given to those occupants of adjacent building/structures who have direct horizontal access to these floors</li> <li>- provided at all direct means of access to the floor, such as but not limited to stairways, ramps, emergency ingress or egress, elevators, escalators, ladders, hallways, corridors and trapdoors.</li> </ul> <p>Verify that, if the Phase II A abatement work is scheduled to begin less than ten (10) calendar days after the execution of the contract, the property owner and asbestos abatement contractor post or otherwise provide written notice of any asbestos project to residential and business occupants in the building/structure where work will be performed at least three (3) calendar days prior to commencement of work.</p> <p>(NOTE: If an emergency makes it impossible to provide the notice required above, the property owner and asbestos abatement contractor will post or otherwise provide for written notice to residential and business occupants of the building/structure, as soon as practicable after identification of the project.)</p> <p>Verify that posted notices remain in place until completion of the project.</p> <p>Verify that each notice includes the following information:</p> <ul style="list-style-type: none"> <li>- the building/structure address and room location(s) or area designation of the asbestos project</li> </ul> <p>the amount of ACM, PACM or asbestos material present in square feet and/or linear feet, if applicable (piping, fittings and associated insulation (excluding breeching and large (2 foot or greater) diameter piping/fittings/associated insulation) are to be measured in linear feet)</p> <ul style="list-style-type: none"> <li>- the commencement and completion dates of the asbestos project, including any intermediate portions of the project</li> <li>- the name and asbestos handling license number of the asbestos abatement contractor performing the project</li> </ul> |

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| <p><b>T2.5.6.NY.</b> An asbestos survey must be completed by a licensed asbestos contractor prior to demolishing, renovating, remodeling, or repairing (12 NYCRR 56-5.1 (a), (b), (g) and (j)) [Added March 2008].</p> | <ul style="list-style-type: none"> <li>- the name and address of the air monitor asbestos contractor and laboratory for the project.</li> </ul> <p>Verify that no person interferes with these obligations of the property owner and asbestos abatement contractor.</p> <p>Verify that prior to demolishing, renovating, remodeling, or repairing, an asbestos survey is completed by a licensed asbestos contractor.</p> <p>(NOTE: The asbestos survey is not required for the following classes of buildings or structures:</p> <ul style="list-style-type: none"> <li>- an agricultural building</li> <li>- buildings or structures for which original construction commenced on or after January 1, 1974</li> <li>- a structure certified in writing to be structurally unsound by a licensed Professional Engineer, Registered Architect, Building Inspector, Fire inspector or other official of competent jurisdiction</li> <li>- the owner of one and two-family dwellings who contracts for, but does not direct or control the work.)</li> </ul> <p>Verify that a copy of the results of the building/structure asbestos survey is immediately transmitted by the building/structure owner as follows:</p> <ul style="list-style-type: none"> <li>- 1 copy of the completed asbestos survey is sent to the local government entity charged with issuing a permit for such demolition, renovation, remodeling or repair work under applicable State or local laws</li> <li>- the completed asbestos survey for controlled demolition or pre-demolition asbestos projects is also submitted to the appropriate Asbestos Control Bureau district office.</li> </ul> <p>Verify that the completed asbestos survey is kept on the construction site with the asbestos notification and variance, if required, throughout the duration of the asbestos project and any associated demolition, renovation, remodeling or repair project.</p> <p>(NOTE: When any construction activity, such as demolition, remodeling, renovation or repair work, reveals PACM or suspect miscellaneous ACM that has not been identified by the asbestos survey, or has not been identified by other inspections as per current OSHA or EPA requirements, all activities shall cease in the area where the PACM or suspect miscellaneous ACM is found and the Asbestos Control Bureau is notified by telephone by the building/structure owner or their representative, followed with a written notice.)</p> <p>Verify that unassessed PACM or suspect miscellaneous ACM is treated and handled as ACM and assumed to be ACM, unless proven otherwise by standard EPA and OSHA accepted methods.</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>T2.5.7.NY.</b> Minor asbestos projects or minor size regulated abatement work areas must meet specific requirements (12 NYCRR 56-11.3)) [Added March 2008].</p> | <p>(NOTE: This checklist applies to asbestos projects or regulated abatement work areas with abatement of less than or equal to 10 square feet or 25 linear feet of ACM, PACM or asbestos material. Minor asbestos project corrective actions include limited enclosure, spot repair/patching, incidental disturbance clean-up, spot removal, and spot encapsulation.)</p> <p>Verify that power tools used to drill, cut, or otherwise disturb asbestos material in minor size regulated abatement work areas, are manufacturer equipped with HEPA-filtered local exhaust ventilation.</p> <p>Verify that glovebag operations are performed within negative pressure tent enclosures, and utilize commercially available glovebags of at least 6 mil, transparent plastic and no larger than needed.</p> <p>(NOTE: For an isolated event necessary for repair associated with normal operations and maintenance activities, a single glovebag operation may be performed without a negative pressure tent enclosure.)</p> <p>Verify that, if utilizing a tent for minor size asbestos projects, the following are required:</p> <ul style="list-style-type: none"> <li>- an existing room or area that is adjacent to the regulated abatement work area is used for the decontamination of personnel and equipment</li> <li>- all persons don appropriate personal protective equipment before entering the tent in compliance with current OSHA regulations</li> <li>- a HEPA-vacuum or other negative pressure HEPA-filtered ventilation equipment is used to continuously exhaust the tent</li> <li>- all material to be removed is saturated with amended water</li> <li>- asbestos material is removed and sealed in plastic bags prior to removal from tent</li> <li>- edges of asbestos material remaining are encapsulated or sealed with wettable cloth</li> <li>- the substrate from which asbestos was removed and any exposed edges are sealed with encapsulant</li> <li>- cleanup is accomplished as follows: <ul style="list-style-type: none"> <li>- all accumulations of asbestos waste material are containerized and removed</li> <li>- HEPA-vacuums are used to clean all surfaces after gross cleanup</li> <li>- contaminated equipment and all containerized waste are removed from the regulated abatement work area</li> <li>- all surfaces in the regulated abatement work area are wet-cleaned using rags, mops or sponges</li> <li>- negative pressure HEPA-ventilated air equipment is operated for a minimum of 20 minutes following completion of final wet cleaning</li> </ul> </li> <li>- once final cleaning is complete, a visual inspection is completed by the asbestos abatement contractor's supervisor</li> <li>- the worker's disposable protective clothing is removed and left in the tent upon exiting</li> </ul> |

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|  | <ul style="list-style-type: none"> <li>- the plastic sheeting which formed the tent, and the contents thereof, is fully collapsed, starting from the top and working downward and placed in at least a six (6) mil plastic bag or hardwall container, sealed airtight with duct tape and removed for disposal</li> <li>- workers proceed immediately to a shower for decontamination.</li> </ul> |



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| <b>ASBESTOS MANAGEMENT</b><br><br><b>T2.10. Personnel Training</b><br><br><b>T2.10.1.NY.</b> Personnel engaged in asbestos projects must meet licensing requirements (12 NYCRR 56-2.1 and 56-3.1(a)) [Added January 1998; Revised March 2007]. | <p>(NOTE: This checklist item moved here from T2.5.2.NY.; January 1999.)</p> <p>(NOTE: See T.2.5.1.NY. for applicability.)</p> <p>Verify that contractors engaged in asbestos projects have a valid asbestos-handling license issued by the Commissioner.</p> <p>Verify that all firms, corporations or other business entities providing management planning, project design, monitoring, inspection and/or air monitoring services have an asbestos handling license.</p> <p>Verify that individuals employed by firms, corporations or other business entities have the asbestos handling certificate appropriate to the tasks performed by the individuals.</p> <p>Verify that a copy of a valid asbestos-handling license is conspicuously displayed proximate to but outside the work area on an asbestos project.</p> <p>(NOTE: If the asbestos contractor is a sub-contractor to a prime contractor, the proof of license will be submitted by the prime contractor to the party that awarded the contract, prior to retaining such sub-contractor.)</p> <p>Verify that a copy of a valid asbestos handling license for all firms, corporations, or other business entities performing work on the asbestos project is conspicuously displayed proximate to but outside the regulated abatement work area, during Phase IB and Phase IIA through IID of an asbestos project.</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <b>ASBESTOS<br/>MANAGEMENT</b><br><br><b>T2.15.<br/>Asbestos Disposal</b><br><br><b>T2.15.1.NY.</b> Disposal of asbestos waste must follow specific steps (6 NYCRR Section 360-2.17(p)). | <p>Verify that asbestos waste disposed of at a landfill has been removed and packaged according to 40 CFR Part 61, Subparts A and M, and 29 CFR parts 1910 and 1926 (see TEAM Guide Toxic Substances Management section, category T2.15, Asbestos Disposal).</p> <p>Verify that the following measures and precautions are taken to prevent the asbestos fibers from becoming airborne:</p> <ul style="list-style-type: none"> <li>- the permitted transporter first inform the landfill operator of the intent to dispose of asbestos waste, the volume of the waste, and the anticipated date the shipment will arrive at the landfill</li> <li>- the landfill owner or operator then directs the transporter to the selected disposal area</li> <li>- this area is recorded on an operations site plan</li> <li>- the asbestos waste material is placed either:               <ul style="list-style-type: none"> <li>- into a predug trench in the existing refuse, provided the 5 ft groundwater separation distance at existing landfills is met</li> <li>- at the bottom of the working face</li> </ul> </li> <li>- the asbestos waste is backfilled with at least 3 ft of refuse or 18 in. of soil before compaction</li> <li>- backfill material bridges the asbestos waste containers acting as a buffer between the asbestos and the tracks or wheels of the compaction equipment</li> <li>- at the end of the operation, appropriate cover material is immediately applied.</li> </ul> |

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| <b>RADON MANAGEMENT</b><br><br><b>T3.2.</b><br><b>Missing Checklist Items</b><br><br><b>T3.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

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| <b>LEAD-BASED PAINT</b><br><br><b>T4.2.</b><br><b>Missing Checklist Items</b><br><br><b>T4.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |



## SECTION 12

### WASTEWATER MANAGEMENT

#### New York Supplement, March 2010

This section covers the state requirements for Wastewater Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Amalgam Separator* - a type of dental equipment designed to remove dental amalgam particles from the wastewater of a dental facility and meeting the standards specified in subdivision 374-4.2(a) of this Subpart (6 NYCRR 374-4.1) [Added March 2007].
- *Assistant/Shift Operator* - an individual who is employed or appointed by any county, city, village, town, district, or by any state department, agency, or authority, or by any sewer company, corporation, person, or group of persons, or by any industry or institution, and who is designated by the appointing officials as a person who, under the direction of the chief operator, is in responsible supervision of the complete and actual operation of a wastewater treatment plant during a shift or in the absence of the chief operator (Codes, Rules, and Regulations of the State of New York, Title 6, Chapter X, Subchapter A, Part 650, Section 650.2 (6 NYCRR 650.2)).
- *Animal Feeding Operation* - a lot or facility (other than an aquatic animal production facility) where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and the animal confinement areas do not sustain crops, vegetation, forage growth, or post-harvest residues in the normal growing season. Two or more animal feeding operations under common ownership are a single animal feeding operation if they physically adjoin each other, or if they use a common area or system for the disposal of wastes (6 NYCRR 750-1.2) [Added March 2004].
- *Banks* - that land area immediately adjacent to, and which slopes toward, the bed of a watercourse, and which is necessary to maintain the integrity of a watercourse. For purposes of this section, a bank will not be considered to extend more than 50 ft horizontally from the mean high water line; with the following exception: where a generally uniform slope of 45 degrees (100 percent) or greater adjoins the bed of the watercourse, the bank is extended to the crest of the slope or the first definable break in slope, either a natural or constructed (i.e., road or railroad grade) feature, lying generally parallel to the watercourse (6 NYCRR 608.1).
- *Bed* - the land area of a watercourse covered by water at mean high water (6 NYCRR 608.1).
- *Biosolids*- dewatered treatment residuals that meet federal regulations (40 CFR Part 501 - see section 750-1.24 of this Part) and state regulations (Part 360 of this Title) and local rules for reuse concerning metals, pathogens, and vector attraction reduction (6 NYCRR 750-1.2) [Added March 2004].
- *Bypass* - the intentional or unintentional diversion of wastewater or stormwater around any portion of a treatment facility having the effect of reducing the degree of treatment designed for the bypassed portion of the treatment facility (6 NYCRR 750-1.2) [Added March 2004].
- *Chief Operator* - an individual who is employed or appointed by any county, city, village, town, district, or by any state department, agency, or authority, or by any sewer company, corporation, person or group of persons, or by any industry or institution, and who is designated by the appointing officials as the person in responsible supervision of the complete and actual operation of any wastewater treatment plant. It is not intended to include

city managers, superintendents of public works, or municipal or other officials unless their duties include the actual operation of a wastewater treatment plant (6 NYCRR 650.2).

- *Coastal Waters* - those marine waters within the territorial limits of the state other than estuaries and enclosed bays. Long Island Sound is designated as coastal waters for the purposes of thermal discharges (6 NYCRR 700.1).
- *Commissioner* - the Commissioner of Environmental Conservation or a duly authorized representative (6 NYCRR 364.1(c)).
- *Contiguous Zone* - the entire zone established or to be established by the United States under article 24 of the Convention of the Territorial Sea and the contiguous zone (6 NYCRR 750-1.2) [Citation Revised March 2004].
- *Dental Amalgam* - an alloy which contains mercury and other metals used in the practice of dentistry (6 NYCRR 374-4.1) [Added March 2007].
- *Dental Amalgam Waste* - waste from a dental facility containing (6 NYCRR 374-4.1) [Added March 2007]:
  - (i) Dental amalgam that has been in contact with the patient including, but not limited to: extracted teeth with dental amalgam restorations, carving scrap collected at chair-side, dental amalgam captured by chair-side traps, vacuum pump filters, amalgam separators, or other dental amalgam capture devices
  - (ii) Dental amalgam that has not been in contact with the patient including, but not limited to: excess dental amalgam mix and the used pre-encapsulated dental amalgam capsules remaining at the end of a dental procedure
  - (iii) Dental amalgam that may have accumulated in the plumbing system of a dental facility.
- *Dental Facility* - any institution, clinic, office or other location where the practice of dentistry is performed (6 NYCRR 374-4.1) [Added March 2007].
- *Department* - the New York State Department of Environmental Conservation (6 NYCRR 364.1(c)).
- *Discharge* - any addition of any pollutant to state waters, waters of the contiguous zone, or the ocean through an outlet or point source (6 NYCRR 750-1.2) [Citation Revised March 2004].
- *Discharge Monitoring Report (DMR)* - a report submitted by a permittee to the department summarizing the effluent monitoring results obtained by the permittee over periods of time as specified in the SPDES permit (6 NYCRR 750-1.2) [Added March 2004].
- *Disposal System* - a system for disposing of sewage, stormwater, industrial waste or other wastes, including sewer systems and treatment works (6 NYCRR 750-1.2) [Added March 2004].
- *Disposal* - the abandonment, discharge, deposit, injection, dumping, spilling, leaking, or placing of any waste or hazardous waste on or into any lands or waters of the state so that such waste or hazardous waste or any related constituent thereof may enter the environment or be emitted into the air or be discharged into any waters, including groundwaters thereof. Disposal also means the thermal destruction of waste or hazardous waste and the burning of such wastes as fuel for the purpose of recovering usable energy (6 NYCRR 364.1(c)).
- *Disposal System* - a system for disposing of sewage, industrial waste, or other wastes, including sewer systems and treatment works (6 NYCRR 700.1).
- *Effluent Limitations* - any restriction on quantities, qualities, rates and concentrations of chemical, physical, biological, and other constituents of effluents that are discharged into or allowed to run from an outlet or point source, or any other discharge within the meaning of section 17-0501 of the Environmental Conservation Law into surface waters, groundwater, or unsaturated zones (6 NYCRR 700.1).

- *ELAP Identification Number* - the number assigned to a certified laboratory by the New York State Health Department (6 NYCRR 750-1.2) [Added March 2004].
- *Elemental Mercury* - a heavy, silvery-white metal that is liquid at room temperature and is represented by the chemical symbol "Hg" with an atomic number of 80 and an atomic mass of 200.59 (6 NYCRR 374-4.1) [Added March 2007].
- *Enclosed Bays* - those marine waters within the territorial limits of New York State, other than coastal waters or estuaries, in which exchange of sea water is severely limited by barrier beaches. For the purpose of thermal discharges, the following are designated as enclosed bays: Jamaica Bay, Hempstead Bay, Great South Bay, Moriches Bay, Shinnecock Bay, and Mecox Bay (6 NYCRR 700.1) [Citation Revised March 2008].
- *Estuary* - the tidal portion of a river or stream (6 NYCRR 700.1) [Citation Revised March 2008].
- *General SPDES Permit* - a SPDES permit issued pursuant to section 750-1.21 of this Part authorizing a category of discharges (6 NYCRR 750-1.2) [Added March 2004; Citation Revised March 2008].
- *Groundwaters* - those waters in saturated zones (6 NYCRR 700.1) [Citation Revised March 2008].
- *Guidance Value* - such measure of purity or quality for any waters in relation to their reasonable and necessary use as may be established by the Department pursuant to section 702.1 of 6 NYCRR (6 NYCRR 700.1) [Citation Revised March 2008].
- *Individual Sewage Treatment System* - a facility serving one or more parcels of land or residential households and treating sewage or other liquid wastes for discharge into the groundwater of the state, except where a permit for such a facility is required under the applicable provisions of Article 17 of the *Environmental Conservation Law* (Codes, Rules, and Regulations of the State of New York, Title 10, Chapter II, Subchapter I, Part 75, Section 75.3 (10 NYCRR 75.3)).
- *Individual SPDES Permit* - a SPDES permit issued to a single facility in one location in accordance with this Part (as distinguished from a general SPDES permit) (6 NYCRR 750-1.2) [Added March 2004].
- *Industrial-Commercial Waste* - any solid waste which originates at, is generated by, or occurs as a result of any industrial or commercial activity. Industrial-commercial wastes are exemplified by, but not limited to (6 NYCRR 364.1(d)(4)):
  1. liquids such as:
    - a. acids, alkalis, caustics, leachate, petroleum (and its derivatives), and process or treatment wastewaters
    - b. sludges, which are semisolid substances resulting from process or treatment operations or residues from storage or use of liquids
  2. solids such as:
    - a. solidified chemicals, paints, or pigments
    - b. dredge spoil, foundry sand, and the end or byproducts of incineration or other forms of combustion, including bottom ash and fly ash
  3. contained gaseous materials
  4. hazardous waste
  5. any liquid, sludge, septage, solid, semisolid substance or contained gaseous material in which any of the foregoing is intermixed or absorbed, or onto which any of the foregoing is adhered.
- *Large Dental Facility* - an institution which houses fifty (50) or more dental chairs (6 NYCRR 374-4.1) [Added March 2007].
- *Mean Low Water* or *Mean High Water* - respectively, the approximate average low water level or high water level for a given body of water at a given location, that distinguishes between predominantly aquatic and predominantly terrestrial habitat as determined, in order of use, by the following (6 NYCRR 608.1):



1. available hydrologic data, calculations, and other relevant information concerning water levels (e.g., discharge, storage, tidal, and other recurrent water elevation data); (mean high water elevations are established, using this method, for certain waterbodies as presented in 6 NYCRR 608.11)
  2. vegetative characteristics (e.g., location, presence, absence, or destruction of terrestrial or aquatic vegetation)
  3. physical characteristics (e.g., clear natural line impressed on a bank, scouring, shelving, or the presence of sediments, litter, or debris)
  4. other appropriate means that consider the characteristics of the surrounding area.
- *Navigable Waters of the State* - all lakes, rivers, streams, and other bodies of water in the state that are navigable in fact or upon which vessels with a capacity of one or more persons can be operated notwithstanding interruptions to navigation by artificial structures, shallows, rapids, or other obstructions, or by seasonal variations in capacity to support navigation. It does not include waters that are surrounded by land held in single private ownership at every point in their total area (6 NYCRR 608.1).
  - *Outlet* - the terminus of a sewer system, or the point of emergence of any water-borne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the state (6 NYCRR 700.1).
  - *Pathogenic Organism* - any disease-producing organism (6 NYCRR 700.1).
  - *Point Source* - any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel, or other floating craft, from which pollutants are or may be discharged (6 NYCRR 750-1.2) [Citation Revised March 2004].
  - *Pollutant* - dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in Parts 700 et seq of this Title (6 NYCRR 750-1.2) [Citation Revised March 2004].
  - *Raw Sewage* - any untreated sanitary waste (6 NYCRR 364.1(d)(4)).
  - *Regional Permit Administrator* - an employee of the department, one for each of the department's 9 regions, designated to act on the commissioner's behalf in carrying out the provisions of Article 70 of the ECL and Part 621 of this Title, or the regional permit administrator's designated representative. When used in this Part, the regional permit administrator is the one designated for the region in which the permittee discharges (6 NYCRR 750-1.2) [Revised March 2004].
  - *Regulated Waste* - a solid waste which is raw sewage, septage, sludge from a sewage or water supply treatment plant, waste oil, or industrial-commercial waste, including hazardous waste (6 NYCRR 364.1(d)(4)).
  - *Rerefined Oil* - any waste oil from which physical and/or chemical contaminants have been removed so that it is substantially equivalent to virgin distillate or virgin residual oil (6 NYCRR 364.1(d)(4)).
  - *Saline Groundwater* - groundwater having a chloride concentration of more than 250 mg/L or a total dissolved solids concentration of more than 1000 mg/L (6 NYCRR 700.1).
  - *Saline Surface Waters* - all waters that are so designated by the Commissioner (6 NYCRR 700.1).
  - *Saturated Zones* - any extensive portion of the earth's crust that contains sufficient water to fill all interconnected voids or pore spaces (6 NYCRR 700.1).

- *Septage* - the contents of a septic tank, cesspool, or other individual sewage treatment facility which receives domestic sewage waste (6 NYCRR 364.1(d)(4)).
- *Septic Tank* - an underground vessel for treating wastewater by combination of settling and anaerobic digestion (6 NYCRR 650.2).
- *Sewage* - the water-carried human or animal wastes from residences, buildings, industrial establishments, or other places, together with such groundwater infiltration and surface water as may be present (6 NYCRR 700.1).
- *Single Private Ownership* - the ownership by a person, joint ownership by more than one person or a single nongovernmental entity such as an association, corporation, trust, or estate. It does not include ownership by any unit of government, including a village, town, county, city, or the state or the United States or any subdivision, department, agency, or authority thereof (6 NYCRR 608.1).
- *Sludge* - any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility. Sludge does not include the treated effluent from a wastewater treatment plant (6 NYCRR 364.1(d)(4)).
- *Solid Waste* - any garbage, refuse, sludge, or any solid, liquid, semisolid, or contained gaseous material, resulting from industrial, commercial, mining, agricultural, community, or other activities, not excluded, which is discarded, disposed of, burned, or incinerated, including being burned as a fuel for the purpose of recovering usable energy, or is being accumulated, stored, or physically, chemically, or biologically treated in lieu of or prior to being disposed of, burned, or incinerated, or which has served its original use and is sometimes discarded, or is a manufacturing or mining byproduct and sometimes is discarded. The following materials are not solid wastes for the purposes of this section (6 NYCRR 364.1(d)(4)):
  1. domestic sewage and any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly owned treatment works for treatment (domestic sewage means untreated sanitary wastes that pass through a sewer system)
  2. industrial wastewater discharges that are point source discharges for which a permit has been issued pursuant to article 17 of the Environmental Conservation Law
  3. irrigation return flows
  4. radioactive materials which are source, special nuclear, or byproduct material
  5. materials subject to in-site mining techniques which are not removed from the ground as part of the extraction process.
- *Storage* - the holding of solid waste for a temporary period, at the end of which the solid waste is processed, recovered, disposed of, or stored elsewhere (6 NYCRR 364.1(d)(4)).
- *Stream* - a watercourse or portion thereof, including the bed and banks thereof. Small ponds or lakes with a surface area at mean low water level of 10 acres or less and located in the course of a stream shall be considered part of a stream. A stream does not include a pond or lake having a surface area of greater than 10 acres at mean low water level (6 NYCRR 608.1).
- *Surface Impoundment* or *Impoundment* - a facility or part of a facility which is a natural topographical depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with manmade materials), which is designed to hold an accumulation of solid waste in semisolid or liquid form, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons (6 NYCRR 364.1(d)(4)).
- *Thermal Discharge* - a discharge that results or would result in a temperature change of the receiving water (6 NYCRR 700.1) [Citation Revised March 2008].
- *Treatment Works* - any plant, disposal field, lagoon, pumping station, constructed drainage ditch or surface water intercepting ditch, incinerator, area devoted to sanitary landfills, or other works not specifically

mentioned here, installed for the purpose of treating, neutralizing, stabilizing, or disposing of sewage, industrial waste, or other wastes (6 NYCRR 700.1) [Citation Revised March 2008].

- *Waste Oil* - used engine lubricating oil and any other oil, including, but not limited to, fuel oil, motor oil, gear oil, cutting oil, transmission fluid, hydraulic fluid, dielectric fluid, oil storage tank residue, animal oil, and vegetable oil, which has been contaminated by physical or chemical impurities, through use or accident, and has not subsequently been rerefined (6 NYCRR 364.1(d)(4)).
- *Wastewater Treatment Plant* - any plant or facility owned or maintained by any county, city, village, town, district, or by any state department, agency, or authority, or by any sewer company, corporation, person or group of persons, or by any industry or institution, which subjects wastewater to a process for removing or altering the objectionable constituents of wastewater for the purpose of meeting the requirements of its state Pollutant Discharge Elimination System Permit (SPDES) and making it less offensive or dangerous (6 NYCRR 650.2).
- *Watercourse* - that area of land within which or upon which the flow of water is ordinarily confined due to existing topography (6 NYCRR 608.2).
- *Waters or Waters of the State* - lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial limits of the State of New York and all other bodies of surface or underground water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the State or within its jurisdiction (6 NYCRR 658.2) [Added March 2008].

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| <p style="text-align: center;"><b>WASTE WATER MANAGEMENT<br/>GUIDANCE FOR NEW YORK CHECKLIST USERS</b></p> |
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| <p style="text-align: center;"><b>REFER TO CHECKLIST ITEMS:</b></p> |
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| <p>Missing Checklist Items</p> <p>Discharges to the Environment</p> <p>Permits</p> <p>State Permits</p> <p>Treatment Works</p> <p>Dental Clinic Discharges</p> <p>Limitations for Mixing Zones</p> <p>Individual Sewage Systems</p> | <p>WA.2.1.NY.</p> <p>WA.5.1.NY. through WA.5.7.NY.</p> <p>WA.10.1.NY. through WA.10.7.NY.</p> <p>[Moved]</p> <p>WA.20.1.NY. and WA.20.2.NY.</p> <p>WA.81.1.NY. through WA.81.5.NY.</p> <p>WA.90.1.NY. through WA.90.8.NY.</p> <p>WA.100.1.NY. through WA.100.4.NY.</p> |
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| <p style="text-align: center;"><b>GUIDANCE FOR APPENDIX USERS</b></p> |
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| <p><b>REFER TO APPENDIX NUMBERS:</b></p> | <p><b>REFER TO APPENDIX TITLES:</b></p> |
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| <p>12-1</p> | <p>Effluent Standards for Marine Toilets</p> |
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| <p><b>WA.2.</b></p> <p><b>MISSING CHECKLIST<br/>ITEMS</b></p> <p><b>WA.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

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| <p><b>WA.5.</b></p> <p><b>DISCHARGES TO THE ENVIRONMENT</b></p> <p><b>WA.5.1.NY.</b> [Deleted March 2004].</p> <p><b>WA.5.2.NY.</b> Facilities required to apply for a Federal license under Section 401 of the Federal Water Pollution Control Act must have a water quality certification (6 NYCRR 608.9) [Revised January 1998].</p> <p><b>WA.5.3.NY.</b> Certain pollutants must not be discharged into the waters of New York State (6 NYCRR 750-1.3) [Revised January 1998; Revised March 2004].</p> <p><b>WA.5.4.NY.</b> The analytical methods or tests used to determine compliance or noncompliance of waste discharges must be approved by the Department (6 NYCRR 700.2) [Revised January 1998].</p> | <p>(NOTE: 6 NYCRR 654 repealed.)</p> <p>Determine whether the facility is an applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into navigable waters.</p> <p>Verify that the facility has applied for and obtained a water quality certification from the Department.</p> <p>Verify that the facility does not discharge any of the following pollutants:</p> <ul style="list-style-type: none"> <li>- any radiological, chemical, or biological warfare agent or high level radioactive waste</li> <li>- any discharge which the Secretary of the Army, acting through the chief of engineers, finds would substantially impair anchorage and navigation</li> <li>- any discharge to which the Regional Administrator has objected in writing</li> <li>- any discharge from a point source which is in conflict with an approved plan or amendment thereto</li> <li>- when the conditions of the permit do not provide for compliance with the applicable requirements of the CWA</li> <li>- when the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States.</li> </ul> <p>Verify that any analytical method or test used by a facility to determine compliance or noncompliance of sewage, industrial waste, or other waste discharges with requirements is approved by the Department.</p> <p>Verify that effluent samples are collected where the effluent emerges from a treatment works, disposal system, outlet or point source, and prior to being discharged to surface water or the ground, unless specified otherwise by a State Pollutant Discharge Elimination System (SPDES) permit.</p> |

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| <p><b>WA.5.5.NY.</b> Tests or analytical methods for measurement of surface water or groundwater to determine compliance must meet specific requirements (6 NYCRR 700.3) [Revised January 1998].</p> | <p>Verify that tests or analytical methods for measurement or surface water or groundwater to determine compliance with standards or guidance values are made in accordance with one of the following requirements:</p> <ul style="list-style-type: none"> <li>- 40 CFR Part 136, as of 1 July 1988</li> <li>- other tests or analytical methods approved by the Department.</li> </ul> <p>(NOTE: The standards for water quality are contained in Section 13, Water Quality Management, WQ.115.)</p>  |
| <p><b>WA.5.6.NY.</b> Any person possessing a SPDES permit must post a sign at all discharge points to surface waters (6 NYCRR 750-1.12) [Added March 2004].</p>                                      | <p>Verify that all SPDES permittees who discharge to surface waters erect or post a conspicuous and legible sign of not less than eighteen inches by twenty-four inches bearing the following statement:</p> <p>"N.Y.S. Permitted Discharge Point Permit No. (insert SPDES permit number here). For information on this discharge you can contact: (insert contact information here)"</p> <p>Verify that the sign contains the following information:</p> <ul style="list-style-type: none"> <li>- the SPDES permit number as issued by the department</li> <li>- the name and telephone number of the permittee that is the business office repository of the permittee</li> <li>- the name, address and telephone number of the regional office in which the discharge is located.</li> </ul> <p>Verify that the permittee provides for public review at the business office repository or at an off-premises location all the Discharge Monitoring Reports (DMR) prepared to demonstrate compliance with the SPDES permit conditions.</p> <p>Verify that a copy of each DMR is placed on file at the same time it is sent to the department, or within 60 days of preparation for DMRs not required to be submitted to the Department.</p> <p>Verify that this information is kept on file for the period of five years.</p> <p>(NOTE: For dischargers that are not major, significant facilities, the department may choose to include permit provisions that allow for the signage requirements of this section, to be waived.)</p> |
| <p><b>WA.5.7.NY.</b> The discharge of sewage, industrial waste or other wastes must not cause impairment of the best usages of the receiving water (6 NYCRR 701.1) [Added</p>                        | <p>Verify that the discharge of sewage, industrial waste or other wastes does not cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge.</p>   |

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| <p><b>WA.10.</b></p> <p><b>PERMITS</b></p> <p><b>WA.10.1.NY.</b> Facilities must have an SPDES permit to discharge any pollutant (6 NYCRR 750-1.1, 1.4, and 1.5and 2.1) [Revised March 2004].</p> | <p>(NOTE: Moved from WA.15.1.NY., March 2004.)</p> <p>(NOTE: The SPDES is broader in scope than that required by the Federal Pollution Control Act in that the SPDES controls point source discharges to groundwaters as well as to surface waters.)</p> <p>Verify that no person discharges or causes a discharge of any pollutant without a SPDES permit.</p> <p>Verify that all conditions of the permit are met.</p> <p>Verify that the SPDES permit, or a true copy, is kept readily available for reference at the largest wastewater treatment facility on site.</p> <p>(NOTE: The following acts do not require an SPDES permit:</p> <ul style="list-style-type: none"> <li>- any discharge in compliance with the instructions of an on-scene coordinator</li> <li>- any discharge to implement a department approved inactive hazardous waste remedial site program provided that such discharge complies with the substantive requirements of a SPDES permit</li> <li>- any discharge under any remedial or corrective action work plan approved by the department provided that such work plan includes public notification and response to the public and provided that such discharge complies with the substantive requirements of a SPDES permit</li> <li>- additions of pollutants into a POTW that are otherwise in compliance</li> <li>- the construction and use of a new or modified disposal system, point source or outlet, when such disposal system, point source or outlet is designed to discharge or discharges sewage effluent without the admixture of industrial wastes or other wastes to the groundwaters of the State when such discharge consists of a flow of less than one thousand gallons per day</li> <li>- any discharge of sewage from vessels, including effluent from properly functioning marine engines, laundry, shower and galley sink wastes, or any other discharge incidental to the normal operation of a vessel; this exclusion is not to be construed to apply to rubbish, trash, garbage, ballast water or other such materials discharged overboard; nor to discharges when the vessel is operating in a capacity other than a vessel, such as when a vessel is being used as a storage facility, a cannery, or a residence</li> <li>- water, gas or other material that is injected into a well, except a disposal well, to facilitate production of oil, gas, salt or geothermal resources, if the following conditions apply: <ul style="list-style-type: none"> <li>- the well used for injection is approved by authority of the department</li> <li>- the department determines that such injection will not result in the degradation of ground or surface water resources</li> <li>- the injection does not result in a discharge at the surface</li> <li>- injection into the well is approved by the EPA</li> </ul> </li> </ul> |

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|  | <ul style="list-style-type: none"> <li>- dredged or fill material and dredge return water discharged into waters of the State except groundwaters</li> <li>- return flows from irrigated agriculture managed in accordance with best management practices</li> <li>- discharges of radioactive materials</li> <li>- discharges composed entirely of stormwater, to which no pollutant(s) has/have been added by industrial, commercial, or other activity</li> <li>- discharges of yield test, well test and cutting water from water well drilling operations provided such discharges are handled in accordance with best management practices and are for limited duration during well development only.</li> </ul> <p>(NOTE: Discharging an effluent to the waters of the State cannot cause or contribute to contravention of any water quality standards or discharging an effluent in such manner as to expose sewage on the ground surface, impair the quality of waters of the state used for drinking purposes or otherwise create a nuisance or menace to health.)</p> <p>(NOTE: The Department may issue a general permit to cover a category of point sources of 1 or more discharges.)</p> |
| <b>WA.10.2.NY.</b> Certain discharges authorized by an SPDES permit must be monitored (6 NYCRR 750-1.13 (a) through (c)) [Revised January 1998; Revised March 2004]. | <p>(NOTE: Moved from WA.15.2.NY., March 2004.)</p> <p>(NOTE: These requirements for the monitoring of authorized discharges apply only if any of the following criteria is met:</p> <ul style="list-style-type: none"> <li>- the discharge is not a minor discharge</li> <li>- the Regional Administrator requests, in writing, monitoring</li> <li>- the discharge contains toxic pollutants for which an effluent standard has been established by the Administrator</li> <li>- the department applies these requirements to the discharge.)</li> </ul> <p>Verify that the effluent flow (gal/day) is monitored.</p> <p>Verify that the level of pollutants specified by the permit or any pollutant which EPA requests is monitored.</p> <p>Verify that the effluent flow or pollutant is monitored at intervals determined by the Department.</p>  |
| <b>WA.10.3.NY.</b> Specific records must be maintained when an SPDES permitted discharge is monitored (6 NYCRR 750-2.5(c)) [Revised March 2004].                     | <p>(NOTE: Moved from WA.15.3.NY., March 2004.)</p> <p>Verify that records of all information resulting from any monitoring activities required by an SPDES permit are maintained for at least 5 yr, including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records.</p>   |

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| <p><b>WA.10.4.NY.</b> Results from monitoring required by an SPDES permit must be reported to the Department (6 NYCRR 750-2.5(e)) [Citation Revised March 2004; Citation Revised March 2008].</p> <p><b>WA.10.5.NY.</b> Dischargers operating under a general SPDES permit must notify the department (6 NYCRR 750-1.21) [Added March 2004].</p> | <p>Verify that the records of monitoring activities and results include the following information for all samples:</p> <ul style="list-style-type: none"> <li>- date, exact place, and time of sampling</li> <li>- the individual(s) who performed the sampling or measurements</li> <li>- dates on which analyses were performed</li> <li>- the individual(s) who performed the analyses</li> <li>- analytical techniques/methods used</li> <li>- results of such analyses</li> <li>- quality assurance/quality control documentation.</li> </ul> <p>Verify that, when records are stored electronically, the records are preserved in a manner that reasonable assures their integrity and are acceptable to the department.</p> <p>(NOTE: Moved from WA.15.4.NY., March 2004.)</p> <p>Verify that any results obtained pursuant to monitoring requirements are reported on Departmental forms at the end of each month, unless otherwise specified by the Department.</p> <p>Verify that reports on discharges to surface waters are submitted, at a minimum, annually.</p> <p>Verify that the analytical results are reported to the same number of significant digits as the permit limits or action level for that parameter.</p> <p>Verify that on each discharge monitoring report, the ELAP identification number for the laboratory is included.</p> <p>(NOTE: If the monitoring is not performed under ELAP, the MDL for the parameter monitored is provided.)</p> <p>Verify that the discharger notifies the department and obtains permission to discharge in accordance with a general permit.</p> <p>(NOTE: Discharges may be authorized in accordance with a general permit for each of the following categories of discharges or potential discharges:</p> <ul style="list-style-type: none"> <li>- sanitary sewage, excluding industrial waste, from private, commercial or institutional establishments with design flows less than 10,000 gallons per day to groundwater</li> <li>- stormwater from construction activities</li> <li>- stormwater from industrial activities</li> <li>- discharges from Concentrated Animal Feeding Operations</li> <li>- other discharges for which the department has issued a general permit.)</li> </ul> |

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| <p><b>WA.10.6.NY.</b> Dischargers must notify the Regional Water Engineer in advance of any activity that would result in the discharge of pollutant not authorized by the SPDES permit (6 NYCRR 750-2.6 and 2.7) [Added March 2004].</p> | <p>Verify that all existing dischargers that are not POTWs notify the Regional Water Engineer as soon as they know or have reason to believe that any activity has occurred or will occur that would result in the discharge of any pollutant that is not authorized by the SPDES permit.</p> <p>Verify that the Regional Water Engineer is notified at least 45 days in advance of any change in the permitted facility or activity that the permittee knows or has reason to know would occur and that is very likely or certain to result in a bypass or other noncompliance with permit requirements.</p> <p>Verify that the notice contains:</p> <ul style="list-style-type: none"> <li>- a description of the treatment units to be effected</li> <li>- the anticipated character and volume of wastewater and/or stormwater to be discharged</li> <li>- the need for the changes</li> <li>- the anticipated duration of the non-compliance</li> <li>- the receiving stream for the non-complying wastewater and/or stormwater</li> <li>- the anticipated benefits of the change</li> <li>- the alternatives considered</li> <li>- additional information requested by the Regional Water Engineer to assess the effects of and need for such a change.</li> </ul> |
| <p><b>WA.10.7.NY.</b> Permitted discharges must meet management requirements for residuals from permitted discharges, intakes or supply waters (6 NYCRR 750-2.8(e) and (f)) [Added March 2004].</p>                                       | <p>Verify that collected screenings, sludges, other solids or precipitates removed from the permitted discharges, intakes or supply waters are properly stored or disposed that prevents creation of nuisance conditions or the entry of the materials into state waters and is approved by the department.</p> <p>Verify that any live fish, shellfish, or other animals collected or trapped as a result of intake water screening or treatment are returned to their water body habitat.</p> <p>Verify that the permittee maintains records of disposal on all effluent screenings, sludges and other solids associated with the discharge(s).</p> <p>Verify that the following data is compiled and reported to the Department upon request:</p> <ul style="list-style-type: none"> <li>- the sources of the materials to be disposed of</li> <li>- the approximate volumes, weights, water content and (if other than sewage sludge) chemical composition</li> <li>- the method by which they were removed and transported, including the name and permit number of the waste transporter</li> <li>- their final disposal locations.</li> </ul> <p>Verify that reasonable efforts are made, to the extent practical, to reuse biosolids.</p>                        |

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| <p><b>WA.15.</b></p> <p><b>STATE PERMITS</b></p> <p><b>WA.15.1.NY.</b> [Moved March 2004].</p> <p><b>WA.15.2.NY.</b> [Moved March 2004].</p> <p><b>WA.15.3.NY.</b> [Moved March 2004].</p> <p><b>WA.15.4.NY.</b> [Moved March 2004].</p> | <p>(NOTE: Moved to WA.10.1.NY., March 2004.)</p> <p>(NOTE: Moved to WA.10.2.NY., March 2004.)</p> <p>(NOTE: Moved to WA.10.3.NY., March 2004.)</p> <p>(NOTE: Moved to WA.10.4.NY., March 2004.)</p> |

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| <p><b>WA.20</b></p> <p><b>TREATMENT WORKS</b></p> <p><b>WA.20.1.NY.</b> Wastewater treatment plants must be operated only under the supervision of a certified operator (6 NYCRR 650.1 and 650.4).</p> <p><b>WA.20.2.NY.</b> All new or modified disposal systems must have construction and operation permits (6 NYCRR 750-2.10) [Moved January 1998; Revised March 2004].</p> | <p>(NOTE: Treatment plants consisting solely of the following treatment schemes are exempt from this requirement:</p> <ul style="list-style-type: none"> <li>- septic tanks followed by subsurface leaching facilities with eventual discharge to groundwaters, regardless of design capacity</li> <li>- septic tanks followed by open or covered intermittent sand filters, with a designated capacity of less than 50,000 gal/day</li> <li>- wastewater treatment plants which treat industrial wastes exclusively.)</li> </ul> <p>Verify that the treatment plant is operated under the supervision of a certified chief operator or certified assistant/shift operator.</p> <p>Verify that written approval from the department and an issued permit is received prior to any new or modified disposal system being constructed and subsequently operated</p> <p>Verify that the disposal system is not operated until the department accepts the certification that the system is fully completed in accordance with the approved engineering report, plans and specification.</p> <p>(NOTE: Submission of approvable engineering report, plans, and specifications is not required where:</p> <ul style="list-style-type: none"> <li>- the treatment unit is temporarily (less than one year) installed for benchmarking and/or troubleshooting and the permittee has provided notification to the Regional Water Engineer at least 30 days prior to installation</li> <li>- an equivalent or superior treatment unit is installed</li> <li>- changes to treatment units do not have a reasonable potential to affect the discharge.)</li> </ul> <p>Verify that sewer Extensions, public or private, is reviewed and approved before construction and connection to any conveyance tributary to a SPDES permitted discharge.</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>WA.81</b></p> <p><b>DENTAL CLINIC<br/>DISCHARGES</b></p> <p><b>WA.81.1.NY.</b> All dental facility waters likely to come into contact with dental amalgam must be treated prior to discharge (6 NYCRR 374-4.2(a)) [Added March 2007].</p> | <p>Verify that all dental facility waters likely to come into contact with dental amalgam waste are treated prior to discharge by an amalgam separator which is certified to ISO 11143 Standards (Dental Equipment Amalgam Separators).</p> <p>Verify that the amalgam separator achieves a minimum of 99 percent removal efficiency of dental amalgam, by weight, in accordance with ISO 11143 test procedures.</p> <p>(NOTE: Amalgam separators in service at dental facilities prior to 12 May 2006 must be certified, but only need to achieve a minimum 95 percent removal efficiency of dental amalgam, by weight, in accordance with ISO 11143 test procedures.)</p> <p>(NOTE: For large dental facilities (see definitions), the amalgam separator must meet or exceed the applicable ISO 11143 Standards set forth above, but is not required to be ISO certified. If such a separator is not ISO certified, then the minimum removal efficiency certification will be made by a person or firm licensed to practice professional engineering in the State of New York.)</p> <p>Verify that all amalgam separators are properly sized for the volume and flow of the dental facility amalgam wastewater in accordance with the manufacturer's specifications and recommendation, and that the maximum allowable flow rate through the amalgam separator at the dental facility does not exceed the maximum flow rate capacity that the separator was tested at and passed in meeting the ISO standards.</p> <p>Verify that the amalgam separator was installed, operated, and maintained in accordance with the manufacturer's specifications and recommendations.</p> <p>(NOTE: Amalgam separators will also be installed in accordance with any applicable state and local building code requirements.)</p> <p>Verify that amalgam separator are placed in service in accordance with the following schedule:</p> <ul style="list-style-type: none"> <li>- for dental facilities that begin operations after 12 May 2006, the amalgam separator is placed in service prior to beginning operation</li> <li>- for dental facilities operating as of 12 May 2006, the amalgam separator is placed in service no later than 12 May 2008.</li> </ul> <p>(NOTE: Dental facilities where dental amalgam is not placed or removed, including facilities where the specialties of orthodontics, periodontics, prosthodontics and oral and maxillofacial surgery are exclusively performed, are</p> |



| <b>COMPLIANCE CATEGORY:<br/>WASTEWATER MANAGEMENT<br/>New York Supplement</b>   |   |
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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>WA.81.2.NY.</b> All dental amalgam waste must meet storage requirements (6 NYCRR 374-4.2(b)) [Added March 2007].</p> <p><b>WA.81.3.NY.</b> All dental amalgam waste and elemental mercury generated by a dental facility must be sent for mercury recycling (6 NYCRR 374-4.2(c)) [Added March 2007].</p> <p><b>WA.81.4.NY.</b> Dental facilities must specific recordkeeping requirements with respect to dental amalgam (6 NYCRR 374-4.2(d)) [Added March 2007; Revised March 2010].</p> | <p>exempt from the requirements to install an amalgam separator.)</p> <p>Verify that all dental amalgam wastes is collected and stored in air-tight, leak-proof and structurally sound containers.</p> <p>Verify that the containers holding the dental amalgam waste have a label that includes, at a minimum, the type of the dental amalgam waste contained and the date waste was initially placed in the container.</p> <p>Verify that the containers holding the dental amalgam waste tightly closed except when adding or removing dental amalgam waste.</p> <p>Verify that the length of storage of dental amalgam waste within the dental facility does not exceed one year from the date waste was initially placed in the container.</p> <p>Verify that all dental amalgam waste and elemental mercury generated by the dental facility is sent for mercury recycling.</p> <p>Verify that written or electronic certification from the collection service or recycler is obtained by the dental facility, documenting:</p> <ul style="list-style-type: none"> <li>- the name and address of the collection service</li> <li>- the amount, by weight, of dental amalgam waste and elemental mercury collected and the date it was collected</li> <li>- the name and address of the facility where the dental amalgam waste and elemental mercury will ultimately be recycled, and certification that the mercury contained in the waste was destined for recycling.</li> </ul> <p>Verify that records are maintained at the dental facility documenting:</p> <ul style="list-style-type: none"> <li>- the type of amalgam separator(s) installed, manufacturer's model number, unit specifications, date the unit was placed in service and number of chair units serviced by the separator</li> <li>- a description of all maintenance performed on the amalgam separator(s) and the date of completion of such maintenance</li> <li>- the amount, by weight, of dental amalgam waste sent for recycling of mercury, on an annual basis</li> <li>- copies of the correspondence with the collection service or recycler (see WA.81.3.NY.).</li> </ul> <p>Verify that these records are maintained as long as the amalgam separator is in use at the dental facility, and for a minimum of three years.</p> <p>Verify that, when an amalgam separator is installed, written notification is provided to the sewage treatment works or sewer authority that the wastewater</p> |

| <b>COMPLIANCE CATEGORY:<br/>WASTEWATER MANAGEMENT<br/>New York Supplement</b>  |  |
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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>WA.81.5.NY.</b> Dental facilities must comply with specific prohibitions on the use and management of elemental mercury (6 NYCRR 374-4.2(e)) [Added March 2007; Revised March 2010].</p> | <p>discharge is tributary to, if applicable:</p> <ul style="list-style-type: none"> <li>- no later than 30 days following the applicable deadline specified for the facility (see WA.81.1.NY.)</li> <li>- that contains the dental facility name; facility location including street address and municipal subdivision, i.e. city, town, or village, telephone number</li> <li>- the type of amalgam separator(s) installed, manufacturer's model number, unit specifications, date the unit was placed in service and number of chair units serviced by the separator.</li> </ul> <p>Verify that there is no use or possession of elemental mercury in the practice of dentistry in a dental facility unless such elemental mercury is contained in appropriate pre-encapsulated capsules specifically designed for the mixing of dental amalgam.</p> <p>Verify that elemental mercury is not rinsed down the drain, disposed with municipal solid waste or disposed as regulated medical waste.</p> <p>Verify that chair-side traps, screens, vacuum pump filters or other amalgam collection devices containing dental amalgam are not rinsed over drains or sinks that are not equipped with an amalgam separator.</p> <p>Verify that dental amalgam waste is not managed as a regulated medical waste and is not disposed of in containers destined for treatment or disposal as regulated medical waste.</p> <p>Verify that dental amalgam waste and collection equipment are not disinfected by any method that utilizes heat.</p> <p>Verify that dental amalgam waste is not disposed of as municipal solid waste.</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <b>WA.90</b><br><br><b>LIMITATIONS FOR<br/>MIXING ZONES</b><br><br><b>WA.90.1.NY.</b> [Deleted March 2004].<br><br><b>WA.90.2.NY.</b> Thermal discharges to any waters of the state must meet certain general criteria (6 NYCRR 704.1, 704.2(a), and 704.3).<br><br><b>WA.90.3.NY.</b> Thermal discharges to nontrout waters of the state must meet specific criteria (6 NYCRR 704.2(b)(1)). | <p>(NOTE: 6 NYCRR 652 repealed.)</p> <p>Verify that facilities releasing thermal discharges assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the body of water.</p> <p>Verify that all waters of the state receiving thermal discharges meet the following criteria:</p> <ul style="list-style-type: none"> <li>- the natural seasonal cycle is retained</li> <li>- annual spring and fall temperature changes are gradual</li> <li>- large day-to-day temperature fluctuations due to heat of artificial origin are avoided</li> <li>- development or growth of nuisance organisms does not occur in contravention of water quality standards</li> <li>- discharges which would lower receiving water temperature do cause a violation of water quality standards and mixing water requirements</li> <li>- for protection of the aquatic biota from severe temperature changes, routine shut down of an entire thermal discharge at any site is not scheduled from December through March.</li> </ul> <p>Verify that conditions in the mixing zone are not lethal in contravention of water quality standards to aquatic biota that may enter the zone.</p> <p>Verify that the location of mixing zones for thermal discharges does not interfere with spawning areas, nursery areas, and fish migration routes.</p> <p>Verify that nontrout waters receiving thermal discharges meet the following criteria:</p> <ul style="list-style-type: none"> <li>- water temperature at the surface of a stream is not raised to more than 90 °F at any point</li> <li>- at least 50 percent of the cross-sectional area and/or volume of flow of the stream including a minimum of one-third of the surface as measured from shore to shore is not raised more than 5 °F over the temperature existing before the thermal discharge or to a maximum of 86 °F, whichever is less.</li> </ul> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>WA.90.4.NY.</b> Thermal discharges to trout waters of the state must meet specific criteria (6 NYCRR 704.2(b)(2)).</p> | <p>Verify that, in lakes subject to stratification, thermal discharges that will lower the temperature of receiving waters are discharged to the hypolimnion and meet water quality standards in all respects.</p> <p>Verify that no discharge at a temperature over 70 °F is made at any time to streams classified for trout.</p> <p>Verify that, from June through September, the following discharges are not made:</p> <ul style="list-style-type: none"> <li>- a discharge that will raise the temperature of the stream more than 2 °F over existing temperatures</li> <li>- a discharge that will lower the temperature of the stream more than 2 °F over existing temperatures.</li> </ul> <p>Verify that, from October through May, no discharge is made that will raise the temperature of the stream more than 5 °F over existing temperatures or to a maximum of 50 °F, whichever is less.</p> |
| <p><b>WA.90.5.NY.</b> Thermal discharges to lakes must meet specific criteria (6 NYCRR 704.2(b)(3)).</p>                     | <p>Verify that the facility ensures water temperatures at the surface of the lake are not raised more than 3 °F over existing temperatures by thermal discharge.</p> <p>Verify that, in lakes subject to stratification, discharges meet the following criteria:</p> <ul style="list-style-type: none"> <li>- if it will raise the temperature of the lake, it is confined to the epilimnion</li> <li>- if it will lower the temperature of the lake, it is discharged to the hypolimnion and meets the water quality standards.</li> </ul> <p>Verify that, in lakes subject to stratification, thermal discharges that will lower the temperature of receiving waters are discharged to the hypolimnion and meet water quality standards in all respects.</p>  |
| <p><b>WA.90.6.NY.</b> Thermal discharges to coastal waters must meet specific criteria (6 NYCRR 704.2(b)(4)).</p>            | <p>Verify that the facility ensures coastal waters receiving thermal discharges meet the following criteria:</p> <ul style="list-style-type: none"> <li>- the water temperature at the surface is not raised more than 4 °F from October through June nor more than 1.5 °F from July through September from existing temperatures</li> <li>- the water temperature at the surface is not lowered more than 4 °F from October through June or more than 1.5 °F from July through September from existing temperatures.</li> </ul>  |

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| <b>REGULATORY REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>WA.90.7.NY.</b> Thermal discharges to estuaries or portions of estuaries must meet specific criteria (6 NYCRR 704.2(b)(5)).</p> | <p>Verify that estuaries do not have the water temperature at the surface raised to more than 90 °F at any point.</p> <p>Verify that at least 50 percent of the cross sectional area and/or volume of the flow of the estuary, including minimally one-third of the surface as measured from water edge to water edge at any stage of tide, is not:</p> <ul style="list-style-type: none"> <li>- raised to more than 4 °F over existing temperatures or a maximum of 83 °F, whichever is less</li> <li>- lowered more than 4 °F from existing temperatures.</li> </ul> <p>(NOTE: From July through September if the water temperature at the surface before a thermal discharge is more than 83 °F, an increase in temperature, not exceeding 1.5 °F, may be permitted at any point of the estuarine passageway.)</p> |
| <p><b>WA.90.8.NY.</b> Thermal discharges to enclosed bays are prohibited (6 NYCRR 704.2(b)(6)).</p>                                   | <p>Verify that thermal discharges are not released to enclosed bays.</p>  |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <b>WA.100</b><br><br><b>INDIVIDUAL SEWAGE<br/>SYSTEM</b><br><br><b>WA.100.1.NY.</b> Marine toilets used on watercraft must have Departmental certification (6 NYCRR 657.2) [Revised January 1999].<br><br><b>WA.100.2.NY.</b> Sewage passing through a marine toilet in a watercraft underway in waters of the state is considered treated if certain requirements are met (6 NYCRR 656.1).<br><br><b>WA.100.3.NY.</b> [Deleted March 2004].<br><br><b>WA.100.4.NY.</b> Septic tanks installed as part of a disposal system must be inspected (6 NYCRR 750-2.8(d)) [Added March 2004] | <p>Verify that any marine toilet used on watercraft in New York is approved and certified by the Department.</p> <p>(NOTE: The following types of marine toilets are eligible for approval:</p> <ul style="list-style-type: none"> <li>- marine sewage retention assemblies</li> <li>- marine sewage recirculating assemblies</li> <li>- marine sewage incinerating assemblies.)</li> </ul> <p>Verify that the marine toilet is equipped with a chlorinator or chemical treatment facility.</p> <p>Verify that the undiluted effluent meets the standards found in Appendix 12-1.</p> <p>(NOTE: 6 NYCRR 364 covers regulated waste.)</p> <p>Verify that, if a septic tank is installed as part of the disposal system, it is inspected for scum and sludge accumulation at intervals not to exceed one year's duration.</p> <p>Verify that accumulation in the septic tank is removed before the depth of either exceeds one-fourth (1/4) of the liquid depth so that no settleable solids or scum will leave in the septic tank effluent.</p> |

## Appendix 12-1

### Effluent Standards for Marine Toilets

(Source: 6 NYCRR 656.1)

| Items   | Specifications   |
|---|--|
| Floating solids; settleable solids              | Removal of substantially all floating and settleable solids which are readily visible and attributable to sewage |
| Suspended solids                                | Not more than 50 ppm   |
| Five-day biochemical and chemical oxygen demand | Nor more than 50 ppm   |
| Organisms of the coliform group                 | The median MPN value in any series of samples is not in excess of 50/100 mL                                      |

NOTE: pH is not to be lower than 6.5 or the pH of the natural groundwater, whichever is lower, nor greater than 8.5 or the pH of the natural groundwater, whichever is greater.

**SECTION 13**  
**WATER QUALITY MANAGEMENT**  
**New York Supplement, March 2010**

This section covers the state requirements for Water Quality Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

**Definitions**

- *Abandoned Well* - a well whose use has been permanently discontinued. A well shall be deemed abandoned if it is in such a state of disrepair that continued use for the purpose of obtaining a satisfactory groundwater supply is impracticable (10 NYCRR 5-2.3) [Citation Revised January 1998].
- *Action Level* - the concentration of copper or lead that when exceeded trigger actions to be taken by a water system. Copper action level = 1.3 mg/L in 90 percent of 1 L first draw samples. Lead action level = 0.015 mg/L in 90 percent of 1 L first draw samples (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Auxiliary Source* - source of water supply that is not normally used but which has been approved for use by the Department or other state agencies having jurisdiction, and has been developed for use when the normal source or sources fail to meet the water supply requirements (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Community Water System* - a public water system that serves at least five service connections used by year-round residents or regularly serves at least 25 year-round residents (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Construction of Water Wells* - all acts necessary to obtain groundwater by wells, including the location and excavation of the well (10 NYCRR 5-2.3) [Citation Revised January 1998].
- *Contaminant* - any physical, chemical, microbiological, or radiological substances or matter in water (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Contamination* - any substance or characteristic that will make the water unsuitable or unsafe including a constituent or characteristic in an amount exceeding the allowable limits therefore hereinafter set forth (10 NYCRR 170.3) [Citation Revised January 1998].
- *Conventional Filtration* - a series of processes including coagulation, flocculation, sedimentation, and filtration (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Corrosion Inhibitor* - a substance capable of reducing the corrosivity of water toward metal plumbing materials, especially lead and copper, by forming a protective coating on the interior surface of these materials (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *CT* - the product of free residual disinfectant concentration (C) in milligrams per liter determined before or at the first customer, and the corresponding disinfectant contact time (T) in minutes, expressed by the formula  $(C) \times (T) = CT$ . Disinfectant contact time (T) is the time that it takes for water to move from the point of disinfectant application or the previous point of residual disinfectant measurement to a point before or at the point where residual disinfectant concentration (C) is measured (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Department* - the New York State Department of Health (10 NYCRR 5-1.1) [Citation Revised January 1998].



- *Distribution Point* - a sampling point representative of drinking water within the distribution system (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Diatomaceous Earth Filtration* - a process resulting in substantial particulate removal which a precoat cake of diatomaceous earth filter media is deposited on a support membrane (septum), and while the water is filtered by passing through the cake on the septum, additional filter media known as body feed is continuously added to the feed water to maintain the permeability of the filter cake (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Direct Filtration* - a series of processes including coagulation and filtration but excluding sedimentation resulting in substantial particulate removal (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Discharge* - any addition of any pollutant to state waters, waters of the contiguous zone, or the ocean through an outlet or point source (6 NYCRR 750.2) [Added January 1998].
- *Disposal System* - a system for disposing of sewage, industrial waste, or other wastes, including sewer systems and treatment works (6 NYCRR 700.1) [Added January 1998].
- *Dose Equivalent* - the product of absorbed dose from ionizing radiation and such factors as account for differences in biological effectiveness because of the type of radiation and its distribution in the body as specified by the International Commission on Radiological Units and Measurements (ICRU) (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Effective Corrosion Inhibitor Residual* - a concentration sufficient to form a protective coating on the interior walls of a pipe (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Emergency Source* - a source of water supply that is not the regular source or auxiliary source and which is developed during an emergency for temporary use (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Entry Point* - a representative sampling location after the last point of treatment but before the first consumer connection (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Filtration* - a process for removing particulate matter from water by passage through a porous material (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *First Draw Tap Sample for Lead and Copper* - a 1 L sample of water collected from a cold water tap after the water has stood in the plumbing system for at least 6 h and is collected without flushing the tap (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Flocculation* - a process to enhance agglomeration or collection of smaller floc particles into larger, more easily settleable particles through gentle stirring by hydraulic or mechanical mechanisms (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Gross Alpha Particle Activity* - the total radioactivity because of alpha particle emission as inferred from measurements on a dry sample (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Groundwater Directly Influenced by Surface Water* - any water beneath the surface of the ground that exhibits significant and rapid shifts in water characteristics such as turbidity, temperature, conductivity or pH which closely correlates to climatological or surface water conditions and/or which contains macroorganisms, algae, large diameter (3 micrometers or greater) pathogens or insect parts of a surface water origin (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Groundwater Source* - a source of water supply taken from a groundwater aquifer and developed in accordance with 10 NYCRR 5-1.22, but shall not include an admixture of surface water or water exposed to the ground surface (10 NYCRR 5-1.1) [Citation Revised January 1998].

- *Groundwaters* - those waters in saturated zones (6 NYCRR 700.1) [Added January 1998; Citation Revised March 2008].
- *Guidance Value* - such measure of purity or quality for any waters in relation to their reasonable and necessary use as may be established by the Department pursuant to 6 NYCRR 702.1 (6 NYCRR 700.1) [Added January 1998; Citation Revised March 2008].
- *Haloacetic acids (five) (HAA5)* - the sum of the concentrations in milligrams per liter of five specific haloacetic acid compounds, rounded to two significant figures after addition. The five haloacetic acids that comprise the HAA5 are monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid (10 NYCRR 5-1.1) [Added March 2005].
- *Individual Water Supply System* - a water supply intended to supply one or more single parcels of land, except when supplied by a public water supply as defined in 10 NYCRR Part 5 (10 NYCRR 75.3) [Revised January 1998].
- *Large Water System* - a water system that serves more than 50,000 persons (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Lead Service Line* - a service line made of lead that connects the water main to the building inlet and any lead appurtenances connected to the lead service line (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Lead Service Line Sample* - a 1 L sample for lead, collected after the water has stood in the service line for at least 6 h. The sample must be collected directly from a tap on the service line or by calculating and wasting the amount of water in the plumbing system from the sampling point to the service line. At a single family structure, the sample may be collected by running the water until there is a significant change in water temperature (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Manmade Beta Particle and Photon Emitters* - all radionuclides emitting beta particles and/or photons, except the daughter products of thorium-232, uranium-235 and uranium-238 as listed in Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure, National Bureau of Standards, Handbook 69, as amended August 1963, U.S. Department of Commerce (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Maximum Contaminant Level (MCL)* - the maximum permissible level of a contaminant in water which is delivered to the free-flowing outlet of the ultimate user of a public water system. For entry point turbidity, the maximum permissible level is measured at the point of entry to the distribution system of treatment. For principal organic chemicals, unspecified organic chemicals and vinyl chloride, the MCL is measured at the individual sources, unless otherwise specified by the State. Substances added to the water by the user, and limited to the premises of the user, are excluded from this definition (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Maximum residual disinfectant level (MRDL)* - a level of disinfectant measured at a consumer's tap, above which the possibility of unacceptable health effects exists (10 NYCRR 5-1.1) [Added March 2005].
- *Maximum Total Trihalomethane Potential* - the maximum concentration of total trihalomethane produced in a given water containing a free chlorine residual after 7 days at a temperature of 25 °C or above (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Medium Water System* - a water system that serves greater than 3300 and less than or equal to 50,000 persons (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Millirem (mrem)* - 0.001 of a rem (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Noncommunity Water System* - a public water system that is not a community water system (10 NYCRR 5-1.1) [Citation Revised January 1998].

- *Nontransient, Noncommunity Water System* - a public water system that is not a community water system but is a subset of noncommunity water system that regularly serves at least 25 of the same persons, 4 h or more per day, for at least 4 days per week, for at least 26 weeks per yr (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Ocean* - any portion of the high seas beyond the contiguous zone (6 NYCRR 750.2) [Added January 1998].
- *Outlet* - the terminus of a sewer system, or the point of emergence of any water-borne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the state (6 NYCRR 700.1) [Added January 1998].
- *Optimal Corrosion Control Treatment* - the corrosion control treatment that reduces the lead and copper concentrations at users' taps to the lowest reasonably achievable level while ensuring that the treatment does not cause the water system to violate Part 5 of the State Sanitary Code or cause adverse health or operational effects (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Pathogenic Organism* - any disease-producing organism (6 NYCRR 700.1) [Added January 1998].
- *Permit-Issuing Official* - the health commissioner or health officer of a city of 50,000 population or over, the health commissioner or health officer of a county or part-county health district, the state regional health director or area director having jurisdiction, a grade I or grade II public health administrator qualified and appointed pursuant to Part 11 of this Title, or any county health director having all the powers and duties prescribed in section 352 of the Public Health Law. The health commissioner or health officer of a city of 50,000 population or over, or the health commissioner or health officer of a county or part-county health district, or such grade I or grade II public health administrator or county health director may designate the director of environmental health of such district; and the state regional health director or area director may designate the district sanitary engineer as additional persons authorized to issue the permits required by this Part (10 NYCRR 5-2.3) [Citation Revised January 1998].
- *Person* - an individual, corporation, company, association, partnership, State agency, municipality including a county, or Federal agency (10 NYCRR 5-1.1) [Added March 2005].
- *picoCurie* - that quantity of radioactive material producing 2.22 nuclear transformations per minute (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Point of Use* - the free-flowing outlet of the ultimate user of a public water system (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Point Source* - any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel, or other floating craft, from which pollutants are or may be discharged (6 NYCRR 750.2) [Added January 1998].
- *Principal Organic Contaminant (POC)* - any organic chemical compound belonging to the following classes, except for trichloromethane (chloroform), dibromochloromethane, bromodichloromethane, tribromomethane (bromoform):
  - halogenated Alkane
  - halogenated ether
  - halobenzenes and substituted halobenzenes
  - benzene and alkyl- or nitrogen-substituted benzenes
  - substituted, unsaturated hydrocarbons
  - halogenated nonaromatic cyclic hydrocarbons (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Protected from Contamination* - includes, in addition to responsibility for the prevention of contamination, responsibility for the reservation, surveillance, storage, diversion, collection, treatment, processing, distribution, and use of water for domestic and municipal purposes (10 NYCRR 170.3) [Citation Revised January 1998].
- *Public Health Hazard* - Public health hazard means an existing or imminent condition which can be responsible for or cause illness, injury or death and for which immediate corrective or remedial action is required. Public health hazards include, but are not limited to, the following (10 NYCRR 5-1.1) [Citation Revised January 1998; Revised March 2005]:

1. an *Escherichia coli* (*E. coli*) MCL violation, or failure to test for *E. coli* after any repeat sample tests positive for coliform;
  2. a nitrate/nitrite MCL violation, or failure to take a confirmation sample within 24 hours for nitrate or nitrite after an initial sample exceeds the MCL;
  3. an acute MRDL violation for chlorine dioxide as specified in section 5-1.52 table 3A of this Subpart, or failure to take the required samples in the distribution system the day after the MRDL is exceeded at the entry point as specified in section 5-1.52 table 15A of this Subpart;
  4. turbidity violations or exceedances specified in paragraph 5-1.78(d)(3) of this Subpart and determined by the State to present an existing or imminent condition which can be responsible for or cause illness, injury or death and for which immediate corrective or remedial action is required;
  5. use of an unapproved or contaminated water supply source;
  6. insufficient quantity of water to meet drinking or sanitary demands;
  7. hazardous or toxic chemical contamination;
  8. disinfection which is inadequate to destroy harmful microorganisms or to maintain a specified chlorine residual;
  9. disruption of water service of four hours or more, determined by the State to present an existing or imminent condition which can be responsible for or cause illness, injury or death and for which immediate corrective or remedial action is required;
  10. cross-connections of sufficient hazard to adversely affect the health of a water consumer; and
  11. any other conditions, including a waterborne disease outbreak, determined to be a public health hazard by the commissioner.
- *Public Notification* - disseminating information about a problem with a public water system in a form and manner consistent with section 5-1.78 of this Subpart (10 NYCRR 5-1.1) [Added March 2005].
  - *Public Water System* - a community, noncommunity, or nontransient noncommunity water system which provides piped water to the public for human consumption, if such system has at least five service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such term includes: (10 NYCRR 5-1.1)
    1. collection, treatment, storage and distribution facilities under control of the supplier of water of such system and used with such system, and
    2. collection or pretreatment storage facilities not under such control which are used with such system.
  - *Raw Water* - water immediately before the first or only point of disinfection or other treatment (10 NYCRR 5-1.1) [Citation Revised January 1998].
  - *Regular Source* - a source of water supply that is normally used and is approved by the Department and other state agencies having jurisdiction (10 NYCRR 5-1.1) [Citation Revised January 1998].
  - *rem* - the unit dose equivalent from ionizing radiation to the total body or any internal organ or organ system (10 NYCRR 5-1.1) [Citation Revised January 1998].
  - *Saline Groundwater* - groundwater having a chloride concentration of more than 250 mg/L or a total dissolved solids concentration of more than 1000 mg/L (6 NYCRR 700.1) [Added January 1998].
  - *Saline Surface Waters* - all waters that are so designated by the Commissioner (6 NYCRR 700.1) [Added January 1998].
  - *Saturated Zones* - any extensive portion of the earth's crust that contains sufficient water to fill all interconnected voids or pore spaces (6 NYCRR 700.1) [Added January 1998].
  - *Sedimentation* - a process for removal of solids before filtration by gravity or separation (10 NYCRR 5-1.1) [Citation Revised January 1998].
  - *Service Connection* - the pertinent pipes, valves and fittings that connect a distribution system to a consumer's facility (10 NYCRR 5-1.1) [Citation Revised January 1998].

- *Sewage* - the water-carried human or animal wastes from residences, buildings, industrial establishments, or other places, together with such groundwater infiltration and surface water as may be present (6 NYCRR 700.1) [Added January 1998].
- *Shellfish* - includes oysters, scallops, clams, mussels, and other aquatic mollusks, and lobsters, shrimp, crayfish, crabs, and other aquatic crustaceans (NYCRR 700.1) [Added March 2009].
- *Single Family Structure* - a building constructed as a single-family residence that is currently used as either a residence or a place of business (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Slow Sand Filtration* - a process involving passage of raw water through a bed of sand at low velocity resulting in particulate removal by physical or biological mechanisms (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Small Water System* - a water system that serves 3300 or fewer persons (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Source of Water Supply* - any groundwater aquifer or watercourse from which water is taken either periodically or continuously for drinking, culinary, or food-processing purposes, or which has been designated for present or future use as a source of water supply for domestic or municipal purposes (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *State* - the State Commissioner of Health, or his designated representative (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *State Notification* - notifying the state by telephone, facsimile (FAX) copy or other means within 24 h of learning of the existence or potential existence of a public health hazard, or within 48 h after the supplier of water learns of a failure to comply. The initial telephone notification to the state shall be confirmed, by the supplier of water within 24 h, by certified letter (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Supplier of Water* - any person who owns or operates a public water system (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Surface Water* - all water open to the atmosphere and subject to surface runoff (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Thermal Discharge* - a discharge that results or would result in a temperature change of the receiving water (6 NYCRR 700.1(a)(44)) [Added January 1998].
- *Tier 1 Notification* - the category for public notifications that are required within 24 hours of learning of a public health hazard. Section 5-1.78(c) of this Subpart lists the specific requirements for Tier 1 notifications (10 NYCRR 5-1.1) [Added March 2005].
- *Tier 2 Notification* - the category for public notifications that are required within 30 days of learning of a violation or situation with the potential to have serious adverse effects on human health after long term exposure, such as most MCL, MRDL and treatment technique violations that are not public health hazards. Section 5-1.52 table 13 of this Subpart lists violations and situations that require Tier 2 notification; section 5-1.78(d) of this Subpart lists the specific requirements for Tier 2 notifications (10 NYCRR 5-1.1) [Added March 2005].
- *Tier 3 Notification* - the category for public notifications that are required within one year (30 days for transient noncommunity water systems) of learning of a less serious violation or situation that does not require a Tier 1 or Tier 2 notification, such as most monitoring violations. Section 5-1.52 table 13 of this Subpart lists violations and situations that require Tier 3 notification; section 5-1.78(e) of this Subpart lists the specific requirements for Tier 3 notifications (10 NYCRR 5-1.1) [Added March 2005].

- *Total Trihalomethane (TTHM)* - the sum of the concentration of trichloromethane (chloroform), dibromochloromethane, bromodichloromethane and tribromomethane (bromoform) (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Transient Noncommunity Water System (TNC)* - a noncommunity water system that does not regularly serve at least 25 of the same people over six months per year (10 NYCRR 5-1.1) [Added March 2005].
- *Trout* - any fish in the following genera: Coregonus, Oncorhynchus, Prosopium, Salmo, Salvelinus and Thymallus (NYCRR 700.1) [Added March 2009].
- *Trout Waters* - waters that provide habitat in which trout can survive and grow within a normal range on a year-round basis, or on a year-round basis excepting periods of time during which almost all of the trout inhabiting such waters could and would temporarily retreat into and survive in adjoining or tributary waters due to natural circumstances. When these conditions exist or have been met a water may be classified as a trout water and identified with the symbol (T), appearing in an entry in the "standards" column in the classification tables of parts 800 through 941 of this Title (NYCRR 700.1) [Added March 2009].
- *Trout Spawning Waters* - trout waters in which trout eggs can be deposited and be fertilized by trout inhabiting such waters (or connecting waters) and in which those eggs can develop and hatch, and the trout hatched therefrom could survive and grow to a sufficient size and stage of development to enable them to either remain and grow to adult trout therein, or migrate into and survive in other trout waters. When these conditions exist or have been met a water may be classified as a trout spawning water and identified with the symbol (TS), appearing in an entry in the "standards" column in the classification tables of Parts 800 through 941 of this Title (NYCRR 700.1) [Added March 2009].
- *Unspecified Organic Contaminant (UOC)* - any organic chemical compound not otherwise specified in the regulations (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Violation* - failure to comply with or conform to the provisions of these regulations (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Virus* - a virus of fecal origin infectious to humans by waterborne transmission (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Water Supply Emergency Plan* - a plan approved by the state and filed with the state at such location as specified by the Commissioner. The plan shall address the actions to be taken by a water supplier to anticipate water supply emergencies and the steps to be taken to ensure the delivery of potable water during a water supply emergency (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Water Treatment Assistant Operator* - a person who, under the direction of a certified water treatment operator, is involved in the day-to-day operation of a water treatment plant or a major segment of a water treatment plant at a community water system (10 NYCRR 5-4.1) [Citation Revised January 1998].
- *Water Treatment Operator* - the certified person in responsible charge of the operation of the water treatment plant at a community water system (10 NYCRR 5-4.1) [Citation Revised January 1998].
- *Water Treatment Plant* - any plant or equipment that, through the addition of chemicals or through aeration, ion exchange, demineralization, coagulation, sedimentation, or filtration, or through any other means or combinations of treatment, shall change the physical, chemical, radiological, or microbiological quality of water (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Waterborne Disease Outbreak* - the occurrence of acute infectious illness epidemiologically associated with the ingestion of water from a public water system (10 NYCRR 5-1.1) [Citation Revised January 1998].
- *Well* - any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of such excavation is for the location or acquisition of groundwater, but such does not include an

excavation made for the purpose of obtaining or for prospecting for oil, natural gas, minerals, or products of mining or quarrying, or for inserting media to repressure oil or natural gas-bearing formation or for storing petroleum, natural gas or other products (10 NYCRR 5-2.3) [Citation Revised January 1998].

**WATER QUALITY MANAGEMENT  
GUIDANCE FOR NEW YORK CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

|  |                                   |
|--|-----------------------------------|
| Missing Checklist Items                        | WQ.2.1.NY.                        |
| State-Specific Requirements                    |                                   |
| Permits/Notifications/Exemptions               | WQ.5.1.NY.                        |
| Operators                                      | WA.6.1.NY.                        |
| Public Water Systems                           |                                   |
| General  | WQ.10.1.NY. through WQ.10.10.NY.  |
| Monitoring/Sampling                            | WQ.15.1.NY. through WQ.15.11.NY.  |
| Disinfection and Filtration                    | WQ.20.1.NY. through WQ.20.9.NY.   |
| Lead and Copper                                | [Deleted]                         |
| Notification and Reporting Requirements        | WQ.30.1.NY. through WQ.30.6.NY.   |
| Community Water Systems                        |                                   |
| Standards                                      | [Moved].                          |
| Monitoring/Sampling                            | WQ.40.1.NY. through WQ.40.7.NY.   |
| Notification and Reporting Requirements        | WQ.45.1.NY.                       |
| Lead and Copper                                | [Deleted]                         |
| Noncommunity Water Systems                     |                                   |
| Monitoring/Sampling                            | WQ.65.1.NY. and WQ.65.3.NY.       |
| Notification and Reporting Requirements        | WQ.75.1.NY.                       |
| Nontransient Noncommunity Water Systems (NTNC) |                                   |
| Monitoring/Sampling                            | WQ.77.1.NY. through WQ.77.3.NY.   |
| Lead and Copper                                | [Deleted]                         |
| State-Specific Categories of Water Systems     | WQ.85.1.NY.                       |
| Drinking Water Well                            | WQ.90.1.NY. through WQ.90.8.NY.   |
| Miscellaneous Water Well                       | WQ.100.1.NY.                      |
| Water Quality Standards                        | WQ.115.1.NY. through WQ.115.3.NY. |



| GUIDANCE FOR APPENDIX USERS |  |
|-----------------------------|--|
| REFER TO APPENDIX NUMBERS:  | REFER TO APPENDIX TITLES:  |
| 13-1                        | Inorganic Chemical Maximum Contaminant Levels (MCLs)   |
| 13-2                        | Organic Chemical Maximum Contaminant Levels (MCLs)   |
| 13-3                        | Organic Chemicals--Pesticides, Dioxins, PCBs   |
| 13-4                        | Principal Organic Contaminants (POCs)  |
| 13-5                        | [Deleted]  |
| 13-6                        | [Deleted]  |
| 13-7                        | Required Notifications   |
| 13-8                        | Required Minimum Grade for Water Treatment Plants and Distribution System Operators                |
| 13-9                        | Standards of Raw Water Quality   |
| 13-10                       | Narrative Water Quality Standards  |
| 13-11                       | Water Quality Standards for pH, Dissolved Oxygen, Dissolved Solids, Odor, Color, and Turbidity     |
| 13-12                       | Groundwater Effluent Standards - Class GA  |
| 13-13                       | Required Minimum Separation Distances to Protect Water Wells From Contamination Contaminant Source |
| 13-14                       | Water Classifications  |
| 13-15                       | Total And Fecal Coliform Standards   |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <p><b>WQ.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>WQ.2.1.NY.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p> | <p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>   |
| <b>STATE-SPECIFIC REQUIREMENTS</b><br><br><b>WQ.5.</b><br><b>Permits/ Notifications/ Exemptions</b><br><br><b>WQ.5.1.NY.</b> Suppliers of water that install, construct, or modify a public water system must have approval from the state (10 NYCRR 5-1.22(a) and (d)). | <p>Verify that suppliers of water have their plans and specifications approved prior to making, installing or constructing, or allowing to be made, installed or constructed, a public water system or any addition or deletion to or modification of a public water system.</p> <p>Verify that materials used in the design, construction, and repair of a public water system are lead-free.</p> <p>(NOTE: For purposes of this requirement, lead-free means:</p> <ul style="list-style-type: none"> <li>- solder or flux which contains no more than 0.2 percent lead</li> <li>- pipes, pipe fittings or any appurtenances which contain no more than 8 percent lead.)</li> </ul> <p>Verify that the supplier of water has received approval from the state prior to placing the system into service.</p> |

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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>  |
| <b>STATE-SPECIFIC REQUIREMENTS</b><br><br><b>WQ.6. Operators</b><br><br><b>WQ.6.1.NY.</b> Water treatment plant operators and water distribution system operators must be certified (10 NYCRR 5-4.2 and 5-4.7) [Revised January 1998]. | <p>(NOTE: The requirement for certified water treatment plant operators and water distribution system operators was moved from WQ.35.1.NY.)</p> <p>Verify that water treatment plants are under the responsible charge of a water treatment operator and water treatment assistant operator.</p> <p>Verify that a distribution system serving 1000 or more people is under the responsible charge of a distribution system operator.</p> <p>(NOTE: Population figures will be based on an average of four residents per dwelling unit, unless otherwise demonstrated by the supplier of water.)</p> <p>Verify that water treatment operators, assistant operators, and distribution system operators are certified by the state at the required level set forth in Appendix 13-8.</p> <p>(NOTE: Certifications must be renewed every 4 yr.)</p> |



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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <b>WQ.10.4.NY.</b> Public water systems must be protected from potential contamination within the premises of the user (10 NYCRR 5-1.31) [Revised January 1998; Revised March 2005]. | <p>(NOTE: These Public Water Systems requirements apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Verify that public water systems are protected from potential contamination within the premises of users by:</p> <ul style="list-style-type: none"> <li>- requiring an approved air gap, reduced pressure zone device, double check valve assembly or equivalent protective device consistent with the degree of hazard posed by any service connection</li> <li>- requiring users of connections to submit plans for the installation of protective devices to the supplier of water and/or the state for approval</li> <li>- requiring all protective devices to be tested at least annually.</li> </ul> <p>Verify that records of protective device testing made available to and maintained by the supplier of water.</p> <p>Verify that protective device testing is performed by a certified backflow prevention device tester.</p> <p>Verify that public water system users do not establish a separate source of water.</p> <p>(NOTE: If the user justifies the need for a separate source of water, the supplier of water must protect the public water system in the following manner:</p> <ul style="list-style-type: none"> <li>- the user is required to regularly examine the quality of the separate water source</li> <li>- the supplier is to approve the use of only those separate water sources which are properly developed, constructed, protected and found to meet all drinking water standards</li> <li>- the approval of the separate water source is submitted to the state annually.)</li> </ul> <p>Verify that users of a public water system prevent cross-connections between the potable water piping system and any other piping system within the premises.</p> <p>(NOTE: Any installation, service, maintenance, testing, repair or modification of a backflow prevention device shall be performed in accordance with the provisions of any county, city, town or village having a plumbing code.)</p> <p>(NOTE: For this section, a backflow prevention device is an approved air gap, reduced pressure zone device, double check valve assembly or equivalent protection device designed to prevent or contain potential contamination of a public water system.)</p> |
| <b>WQ.10.5.NY.</b> Equalizing or distribution reservoirs without later treatment must meet specific water protection standards (10 NYCRR 5-1.32)                                     | <p>(NOTE: These Public Water Systems requirements apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Verify that equalizing and distribution reservoirs which deliver water to the user without later treatment are either:</p>  |

| <b>COMPLIANCE CATEGORY:</b><br><b>WATER QUALITY MANAGEMENT</b><br><b>New York Supplement</b>   |  |
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| <b>REGULATORY REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:</b><br><b>March 2010</b>   |
| <p>[Revised January 1998].</p> <p><b>WQ.10.6.NY.</b> Suppliers of water and operators of public water systems must meet specific pollution prevention and safety standards (10 NYCRR 5-1.71 and 5-1.72(b)) [Citation Revised January 1998].</p> <p><b>WQ.10.7.NY.</b> Public water systems must maintain records and submit specific records to the state (10 NYCRR 5-1.72(c) and (d)(1) through (5)) [Citation Revised January 1998].</p> | <ul style="list-style-type: none"> <li>- covered, or</li> <li>- the water from the uncovered reservoir is continuously disinfected in a manner approved before being discharged to the distribution system.</li> </ul> <p>(NOTE: These Public Water Systems requirements apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Verify that suppliers of water and the person or persons operating a public water systems operate and maintain the public water system in a manner that prevents pollution or the depletion of public water system sources.</p> <p>(NOTE: These Public Water Systems requirements apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Verify that the daily operation records of the public water system are maintained and a copy submitted to the state by the 10th calendar day of the next reporting period.</p> <p>Verify that daily operating records include the required results of all tests, measurements or analysis.</p> <p>Verify that public water systems maintain the following records at a convenient location:</p> <ul style="list-style-type: none"> <li>- microbiological analyses, retained for at least 5 yr</li> <li>- chemical and turbidity analyses, retained for at least 10 yr</li> <li>- actions taken by the supplier of water to correct violations, retained for at least 3 yr</li> <li>- copies of written reports, including summaries or communications related to public water system sanitary surveys, retained for at least 10 yr</li> <li>- records related to variances or exemptions, retained for at least 5 yr.</li> </ul> <p>Verify that, if data is maintained in tabular summaries instead of the actual laboratory reports, the following information is included in the summaries:</p> <ul style="list-style-type: none"> <li>- the date, place and time of sampling, and the name of the person who collected the sample</li> <li>- the type of sample (routine distribution point sample, check sample, raw or process water sample, or other special purpose sample)</li> <li>- date of analyses</li> <li>- laboratory and person responsible for performing the analysis</li> <li>- the analytical technique or method used</li> <li>- the results of the analysis.</li> </ul> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
| <p><b>WQ.10.8.NY.</b> Public water system analyses must be performed by approved laboratories (10 NYCRR 5-1.73 and 5-1.74) [Revised January 1998].</p>                             | <p>Verify that consumer requested public water system records or data summaries are provided within 15 days of a written request.</p> <p>(NOTE: These Public Water Systems requirements apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Verify that public water systems use laboratory facilities approved by the state.</p> <p>Verify that public water systems perform tests for the control of the system's operation daily or more frequently, if state required.</p> <p>(NOTE: Measurements for pH, temperature, turbidity disinfectant residual, alkalinity, calcium, orthophosphate and silica, may be performed by any person with a demonstrated ability to perform these analyses.)</p> |
| <p><b>WQ.10.9.NY.</b> [Deleted January 1998].</p>  | <p>(NOTE: This checklist item is equivalent to the Federal.)</p>  |
| <p><b>WQ.10.10.NY.</b> Public water systems must not exceed the MCLs for inorganic chemicals not including nitrate (10 NYCRR 5-1.52, Table 1) [Citation Revised January 1998].</p> | <p>(NOTE: These Public Water Systems requirements apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Verify that public water systems do not exceed the MCL values for the inorganic chemicals listed in Appendix 13-1.</p> <p>Verify that if the results of a monitoring sample analysis exceed the MCL, one more sample from the same sampling point is collected within 2 weeks or as soon as practical.</p> <p>(NOTE: An MCL violation occurs when the average of the two results exceeds the MCL.)</p>   |



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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>PUBLIC WATER SYSTEMS</b></p> <p><b>WQ.15.<br/>Monitoring/Sampling</b></p> <p><b>WQ.15.1.NY.</b> Public water systems must not exceed the MCL for nitrate, nitrite, and total nitrate/nitrite (10 NYCRR 5-1.52, Table 2) [Citation Revised January 1998].</p> <p><b>WQ.15.2.NY.</b> Public water systems must meet monitoring standards for nitrates and nitrites (10 NYCRR 5-1.52, Table 8C) [Revised January 1998].</p> | <p>(NOTE: The minimum monitoring requirements apply to all public water systems except for public water systems with fewer than 15 service connections and which serve fewer than 25 persons, where monitoring will be at State discretion.)</p> <p>Verify that the public water system does not exceed the following MCL levels as nitrogen:</p> <ul style="list-style-type: none"> <li>- nitrate, 10 mg/L</li> <li>- nitrite, 1 mg/L</li> <li>- total nitrate/nitrite, 10.0 mg/L.</li> </ul> <p>Verify that if nitrate, nitrite, or total nitrate/nitrite concentrations exceed the MCL, the water system collects another sample from the same sampling point, within 24 h of receipt of the results or as soon as practical.</p> <p>Verify that systems unable to collect an additional sample within 24 h issue a public notice to consumers and collect the additional sample within 2 weeks of receiving the initial sample results.</p> <p>(NOTE: An MCL violation occurs when the average of the two results exceeds the MCL.)</p> <p>(NOTE: The minimum monitoring requirements apply to all public water systems except for public water systems with fewer than 15 service connections and which serve fewer than 25 persons, where monitoring will be at State discretion.)</p> <p>Verify that water systems conduct repeat monitoring for nitrate as follows:</p> <ul style="list-style-type: none"> <li>- for groundwater, if equal to or greater than 50 percent of the MCL, monitor quarterly for 1 yr</li> <li>- for surface water, if less than 50 percent MCL, collect one sample per year.</li> </ul> <p>Verify that, if the water system is equal to or greater than 50 percent of the MCL for nitrite, repeat sampling is conducted quarterly for at least 1 yr.</p> <p>(NOTE: The sampling frequency for water systems with less than 50 percent of the MCL for nitrite is at the state's discretion.)</p> <p>Verify that surface water systems return to quarterly monitoring if any one sample</p> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>  | <b>REVIEWER CHECKS:<br/>March 2010</b>   |
| <p><b>WQ.15.3.NY.</b> Public water systems must not exceed the MCLs for specific organic chemical (10 NYCRR 5-1.52, Table 3) [Citation Revised January 1998].</p> <p><b>WQ.15.4.NY.</b> Public water systems must meet minimum monitoring standards for organic chemicals (10 NYCRR 5-1.52, Table 9C) [Citation Revised January 1998].</p> | <p>is greater than 50 percent of the MCL.</p> <p>(NOTE: The minimum monitoring requirements apply to all public water systems except for public water systems with fewer than 15 service connections and which serve fewer than 25 persons, where monitoring will be at State discretion.)</p> <p>Verify that public water systems do not exceed the MCLs for the organic chemicals listed in Appendix 13-2.</p> <p>Verify that if the results of a monitoring sample analysis exceeds the MCL, one to three more samples are collected from the same sampling point as soon as practical, but within 30 days.</p> <p>(NOTE: An MCL violation occurs when at least one of the confirming samples is positive and the average of the initial sample and all confirming samples exceeds the MCL.)</p> <p>Verify that, if the system initially detected the organic chemicals listed in Appendix 13-3, monitoring is conducted quarterly thereafter.</p> <p>Verify that, if the system initially did not detect the organic chemicals listed in Appendix 13-3, monitoring is conducted as follows:</p> <ul style="list-style-type: none"> <li>- systems that serve 3300 or more persons, one sample every 18 mo per source</li> <li>- systems that serve fewer than 3300 persons and more than 149 service connections, once per entry point every 3 yr</li> <li>- system that serve fewer than 3300 persons and fewer than 150 service connections, once per entry point every 3 yr for group 1 chemicals and group 2 chemicals monitored at the state's discretion.</li> </ul> <p>(NOTE: Monitoring of the organic chemicals listed in Appendix 13-3 is at the state's discretion for noncommunity water systems.)</p> <p>(NOTE: Monitoring of group 2 organic chemicals is at the state's discretion for systems that serve fewer than 3300 persons and fewer than 150 service connections.)</p> <p>Verify that the sampling location of each groundwater supply source is between the individual well and at or before the first service connection and before mixing with other sources, unless otherwise specified by the state.</p> <p>Verify that public water systems that take water from a surface water body or watercourse sample at points in the distribution system representative of each source or at entry point or points to the distribution system after any water treatment plant.</p> |

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| <p><b>WQ.15.5.NY.</b> Public water systems must meet minimum monitoring standards for general organic chemicals (10 NYCRR 5-1.52, Table 3) [Revised January 1998].</p>            | <p>Verify that public water systems that monitor annually conduct the organic chemical monitoring during the quarter that previously yielded the highest analytical result.</p> <p>(NOTE: Principle organic contaminants are listed in Appendix 13-4.)</p> <p>Verify that public water systems do not exceed the following general organic chemical MCL levels:</p> <ul style="list-style-type: none"> <li>- principle organic contaminants (POCs), 0.005 mg/L</li> <li>- unspecified organic contaminants (UOCs), 0.05 mg/L</li> <li>- total POCs and UOCs, 0.1 mg/L.</li> </ul> <p>Verify that, if the results of a monitoring sample analysis exceeds the MCLs for any of the general organic chemicals, one to three more samples are collected from the same sampling point as soon as practical but within 30 days.</p> <p>(NOTE: An MCL violation occurs when at least one of the confirming samples is positive and the average of the initial sample and all confirming samples exceeds the MCL.)</p> <p>Verify that the sampling location of each groundwater supply source is between the individual well and at or before the first service connection and before mixing with other sources, unless otherwise specified by the state.</p> <p>Verify that water systems sample surface water sources at points in the distribution systems representative of each source or at an entry point or points to the distribution system after any water treatment.</p> <p>Verify that systems that monitor annually for POCs and vinyl chloride, monitor during the quarter that previously yielded the highest analytical result.</p> |
| <p><b>WQ.15.6.NY.</b> Public water systems must not exceed the MCL for turbidity levels at the distribution point (10 NYCRR 5-1.52, Table 5) [Citation Revised January 1998].</p> | <p>(NOTE: Turbidity monitoring for systems that only utilize groundwater is at the state's discretion. The following turbidity regulations apply to the systems that utilize surface water sources or groundwater sources directly influenced by surface waters and that use direct filtration or another approved filtration technique.)</p> <p>Verify that public water systems do not have a turbidity MCL violation at the distribution point when the monthly average of all distribution samples collected in any calendar mo exceeds 5 NTU.</p>   |
| <p><b>WQ.15.7.NY.</b> Systems that utilize surface water sources</p>  | <p>(NOTE: See WQ.15.6.NY. for applicability.)</p>  |

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| <p>or groundwater sources directly influenced by surface waters must meet filtered water turbidity standards (10 NYCRR 5-1.52, Table 4A) [Citation Revised January 1998].</p> <p><b>WQ.15.8.NY.</b> Public water systems that utilize surface water sources or groundwater sources directly influenced by surface waters must meet the minimum monitoring standards for turbidity (10 NYCRR 5-1.52, Table 10A) [Revised January 1998].</p> <p><b>WQ.15.9.NY.</b> Public water systems must meet coliform monitoring standards (10 NYCRR 5-1.52, Table 11) [Citation Revised January 1998].</p> | <p>Verify that the system does not exceed the following performance standard turbidity levels:</p> <ul style="list-style-type: none"> <li>- conventional filtration systems, 0.5 NTU</li> <li>- slow sand filtration systems, 1.0 NTU</li> <li>- diatomaceous earth filtration systems, 1.0 NTU.</li> </ul> <p>Verify that water systems do not have any of the following MCL treatment technique violations for filtered water turbidity levels:</p> <ul style="list-style-type: none"> <li>- more than 5 percent of the composite filter effluent measurements taken each mo exceed the appropriate performance standard turbidity levels</li> <li>- a representative sample of the filtered water exceeds 5 NTU.</li> </ul> <p>(NOTE: See WQ.15.6.NY. for applicability.)</p> <p>Verify that public water systems monitor filtered water turbidity levels every 4 h or continuously monitor composited filter effluent.</p> <p>Verify that public water systems monitor raw unfiltered water turbidity levels every 4 h or continuously.</p> <p>Verify that community water systems monitor distribution point turbidity levels as follows:</p> <ul style="list-style-type: none"> <li>- five distribution samples each week unless otherwise determined by the state</li> <li>- no two samples are obtained on the same day</li> <li>- no two samples are collected from the same distribution point during the week.</li> </ul> <p>(NOTE: The monitoring frequency of turbidity levels at the distribution point is at the state's discretion for community water systems that utilize only groundwater sources or all noncommunity water systems.)</p> <p>Verify that public water systems collect total coliform samples at sites that are representative of water throughout the distribution system and throughout the period according to a written sample site plan.</p> <p>Verify that public water systems that do not provide filtration and utilize surface water or groundwater directly influenced by surface water sources, collect a sample that meets the following criteria each day the raw water turbidity exceeds 1 NTU:</p> <ul style="list-style-type: none"> <li>- sample is taken near the first service connection</li> <li>- sample is collected within 24 h</li> <li>- sample is analyzed for total coliforms.</li> </ul> |

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| <p><b>WQ.15.10.NY.</b> Public water systems that have a positive total coliform sample must meet repeat sampling standards (10 NYCRR 5-1.52, Table 11 and 5-1.72(d)(6)) [Citation Revised January 1998].</p> | <p>(NOTE: Samples taken when the raw water exceeds 1 NTU is included in determining total coliform MCL compliance. Samples taken to determine disinfection practices after pipe repair, replacement, etc. are not to be used for determining total coliform MCL compliance.)</p> <p>(NOTE: The state may reduce the monitoring frequency for total coliforms.)</p> <p>Verify that, if the system uses chlorine as the disinfectant, a free chlorine residual sample is collected at the same time and location the total coliform sample is collected.</p> <p>(NOTE: Monitoring for heterotrophic bacteria may be substituted for free chlorine residuals. A heterotrophic plate count of 500 colonies/mL is considered equivalent to a measurable free chlorine residual.)</p> <p>Verify that the system collected at least four repeat samples on the same day and within 24 h of notification of a total coliform positive sample.</p> <p>Verify that repeat samples are collected as follows:</p> <ul style="list-style-type: none"> <li>- one repeat sample from the same sampling site that the original coliform positive sample was collected</li> <li>- one repeat sample within five service connections upstream</li> <li>- one repeat sample within five service connections downstream</li> <li>- one repeat sample taken at random in the distribution system.</li> </ul> <p>Verify that, if one or more of the repeat samples is total coliform positive, another set of repeat samples is collected.</p> <p>Verify that the process of repeat sampling is repeated until total coliforms are not detected in one complete set, or it is determined that the MCL has been exceeded.</p> <p>Verify that systems with a single service connection collect a single repeat sample of at least 400 mL.</p> <p>Verify that community and noncommunity water systems analyze any routine or repeat samples that are coliform positive for <i>E. coli</i>.</p> <p>Verify that the supplier of water submits to the state copies of all repeat or special total coliform sample results and all <i>E. coli</i> sample results within 5 days of receipt of the results.</p> <p>Verify that following the mo that repeat samples are collected, the system collects five routine samples or if otherwise determined by the state, at least one routine sample collected before the end of the next mo the system serves water to the public.</p> |

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| <p><b>WQ.15.11.NY.</b> Public water systems must determine total coliform MCL compliance (10 NYCRR 5-1.52, Table 6) [Citation Revised January 1998].</p> | <p>Verify that public water systems do not have any of the following total coliform MCL violations:</p> <ul style="list-style-type: none"> <li>- systems that collect 40 or more samples per mo and more than 5 percent of the total coliform samples are positive</li> <li>- systems that collect less than 40 samples per mo and two or more samples are total coliform positive</li> <li>- a total coliform positive sample is positive for <i>E. coli</i> and a repeat total coliform sample is positive</li> <li>- a total coliform positive sample is negative for <i>E. coli</i> but a repeat sample is positive for total coliform and <i>E. coli</i>.</li> </ul> <p>Verify that the public water system determines compliance with the MCL for total coliforms each mo the system is required to monitor for total coliforms.</p> <p>(NOTE: For notification purposes, an <i>E. coli</i> MCL violation is a public health hazard.)</p> |

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| <p><b>PUBLIC WATER SYSTEMS</b></p> <p><b>WQ.20.<br/>Disinfection and Filtration</b></p> <p><b>WQ.20.1.NY.</b> Public water systems that utilize a groundwater source must meet specific treatment standards (10 NYCRR 5-1.30(a)) [Revised January 1998].</p> <p><b>WQ.20.2.NY.</b> Public water systems that utilizes surface water sources or groundwater sources directly influenced by surface waters must meet specific treatment standards (10 NYCRR 5-1.30(b)) [Revised January 1998; Revised March 2005].</p> <p><b>WQ.20.3.NY.</b> Public water systems that disinfect with chlorine and utilize surface water sources or groundwater sources directly under the influence of surface waters must meet disinfection monitoring standards (10 NYCRR 5-1.30(b)(2), (g), and Table 15) [Citation Revised January 1998].</p> | <p>(NOTE: Treatment standards apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Verify that public water systems that utilize a groundwater source disinfect the water by chlorination or other approved disinfection method.</p> <p>(NOTE: Treatment standards apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Verify that the public water system's treatment of the water includes state-approved filtration and disinfection techniques capable of 99 percent removal; of <i>Cryptosporidium</i> oocysts, capable of inactivation and/or removal of 99.9 percent of <i>Giardia lamblia</i> cysts and 99.99 percent of viruses between a point where the raw water is not longer subject to recontamination by surface water runoff and a point downstream before or at the first consumer.</p> <p>(NOTE: By June 8, 2004, any system that recycles spent filter backwash water, thickener supernatant, or liquids from dewatering process must return these flows through the processes of a system's existing conventional or direct filtration system.)</p> <p>(NOTE: Treatment standards apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Verify that chlorine-using systems maintain a free chlorine residual concentration in the water entering the distribution system that does not drop below 0.2 mg/L for more than 4 h unless otherwise allowed by the state.</p> <p>Verify that systems monitor disinfection levels continuously or collect grab samples at the following frequencies:</p> <ul style="list-style-type: none"> <li>- up to 500 persons served, one sample per day</li> <li>- 501-1000 persons served, two samples per day</li> <li>- 1001-2500 persons served, three samples per day</li> <li>- 2501-3300 persons served, four samples per day</li> <li>- more than 3300 persons served, continuous monitoring only.</li> </ul> |

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|  |           | <p>Verify that, if more than one sample is collected per day, samples are not collected at the same time.</p> <p>Verify that, if grab samples are collected and the disinfection residual concentration falls below 0.2 mg/L, the system collects and analyzes grab samples every 4 h until the disinfection residual concentration is again equal to or greater than 0.2 mg/L.</p> <p>Verify that no more than 5 percent of the free chlorine residual samples are undetectable in any two consecutive mo that the system serves water to the public.</p> <p>(NOTE: If at any time the continuous monitoring equipment fails, grab samples taken every 4 h may be conducted in lieu of continuous monitoring, but for no more than 5 working days following the equipment failure.)</p> |
| <b>WQ.20.4.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.)   |
| <b>WQ.20.5.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.)   |
| <b>WQ.20.6.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.)   |
| <b>WQ.20.7.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.)   |
| <b>WQ.20.8.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.)   |
| <b>WQ.20.9.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.)   |



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| <b>WQ.25.<br/>Lead and Copper</b>  |           |  |
| <b>WQ.25.1.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.) |
| <b>WQ.25.2.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.) |
| <b>WQ.25.3.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.) |
| <b>WQ.25.4.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.) |
| <b>WQ.25.5.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.) |
| <b>WQ.25.6.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.) |
| <b>WQ.25.7.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.) |
| <b>WQ.25.8.NY.</b><br>January 1999].   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.) |
| <b>WQ.25.9.NY.</b>   | [Deleted] | (NOTE: This checklist item is equivalent to the Federal requirements.) |

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| January 1999].  |          |  |
| <b>WQ.25.10.NY.</b><br>January 1999].                                   | [Deleted | (NOTE: This checklist item is equivalent to the Federal requirements.) |
| <b>WQ.25.11.NY.</b><br>January 1999].                                   | [Deleted | (NOTE: This checklist item is equivalent to the Federal requirements.) |
| <b>WQ.25.12.NY.</b><br>January 1999].                                   | [Deleted | (NOTE: This checklist item is equivalent to the Federal requirements.) |

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| <p><b>PUBLIC WATER SYSTEMS</b></p> <p><b>WQ.30.<br/>Notification and Reporting Requirements</b></p> <p><b>WQ.30.1.NY.</b> Public water systems that fail to comply with the treatment technique, monitoring requirements, fail to install filtration, or disinfection treatment facilities must consult the state, consumer, and public and meet notification requirements (10 NYCRR 5-1.30(d)) [Citation Revised January 1998; Revised March 2005].</p> <p><b>WQ.30.2.NY.</b> Public water systems that exceed an MCL, have an MCL violation, fail to comply with a monitoring, treatment, or testing regulation, or have a variance/exemption in effect must meet specific notification standards (10 NYCRR 5-1.52, Table 13) [Citation Revised January 1998].</p> | <p>(NOTE: Notification standards apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Verify that public water systems that fail to comply with a treatment, treatment technique and/or avoidance criteria notify the state and public, including any required mandatory health effects language.</p> <p>Verify that, if at any time the raw water turbidity exceeds 5 nephelometric turbidity units (NTU), the system consults with the State within 24 hours of learning of the exceedance.</p> <p>Verify that, if the State determines that the exceedance constitutes a public health hazard, a Tier 1 notification is distributed.</p> <p>Verify that, when consultation does not take place within the 24 hour period, the water system distributes a Tier 1 notification no later than 48 hours after the system learns of the violation.</p> <p>Verify that chlorine-using systems notify the state when the free chlorine residual of the water entering the distribution system falls below 0.2 mg/L, even if the residual is restored within 4 h.</p> <p>(NOTE: Notification standards apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Determine if the public water system meets any of the following noncompliance violations or has a variance/exemption in effect:</p> <ul style="list-style-type: none"> <li>- single sample exceeds the MCL</li> <li>- an MCL violation</li> <li>- failure to comply with a prescribed treatment technique and/or failure to meet requirements of a variance or exemption schedule</li> <li>- failure to meet monitoring requirements and/or failure to use applicable testing procedure</li> <li>- variance or exemption in effect.</li> </ul> <p>Verify that the public water system meets the notification standards of Appendix 13-7.</p> |

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| <p><b>WQ.30.3.NY.</b> Public water systems that are a source of a water supply that has become noncompliant must notify the state and take specific actions (10 NYCRR 5-1.12) [Revised January 1998; Revised March 2005].</p> | <p>Verify that public water systems which monitor for total POCs and UOCs perform the following public notification:</p> <ul style="list-style-type: none"> <li>- customers are notified of the availability of the initial total POC and UOC sample results in the first water bill issued by the system following receipt of the results or within 3 mo, whichever is sooner</li> <li>- the notice includes the name, address, and telephone number of the supplier of water or the supplier of water's designee for consumer contact and if additional monitoring or follow-up samples are required.</li> </ul> <p>(NOTE: Notification standards apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Determine whether the public water system that is a source of water supply that has become noncompliant due to any of the following criteria:</p> <ul style="list-style-type: none"> <li>- one or more of the MCLs have been exceeded</li> <li>- the effectiveness of treatment process diminishes to the extent that a violation of the treatment techniques or MCLs may occur</li> <li>- a deleterious change in raw water quality has occurred</li> <li>- a change in the character of the watershed or aquifer may affect water quality.</li> </ul> <p>Verify that the state is notified immediately.</p> <p>Verify that the following actions are taken:</p> <ul style="list-style-type: none"> <li>- determine the cause(s) of the condition, independent of known or anticipated treatment technology</li> <li>- modify existing or install treatment to comply</li> <li>- initiate water sampling to delineate the extent and the cause of the concern</li> <li>- investigate the watershed or aquifer to determine any existing or potential changes in the character of the water supply source.</li> </ul> <p>Verify that a written report is submitted to the state within 30 days of the onset of the conditions that summarizes the findings of the investigation.</p> |
| <p><b>WQ.30.4.NY.</b> Public water systems must meet emergency notification standards (10 NYCRR 5-1.23) [Revised January 1998].</p>   | <p>(NOTE: Notification standards apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Verify that approval is received from the state prior to doing the following:</p> <ul style="list-style-type: none"> <li>- using water from any emergency source</li> <li>- stopping or altering disinfection or other treatment processes.</li> </ul> <p>Verify that the state is notified of any 4 h or more interruption of water delivery</p>   |

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| <p><b>WQ.30.5.NY.</b> Public water systems must meet public health hazard notification standards (10 NYCRR 5-1.70 and 5-1.77(a)) [Revised January 1998; Revised March 2008].</p> <p><b>WQ.30.6.NY.</b> [Deleted January 1999].</p> | <p>that meets any of the following criteria:</p> <ul style="list-style-type: none"> <li>- interruption to a minimum of 25 individuals or 15 service connections</li> <li>- interruption to a minimum of 1 percent of the total number of individuals served or service connections which ever is larger.</li> </ul> <p>Verify that the emergency notification regulations are conspicuously posted in the office of the water supplier.</p> <p>(NOTE: Notification standards apply to all public water systems with 15 or more service connections or serve 25 or more persons.)</p> <p>Verify that the supplier of water notifies the State within 24 hours of learning of the existence or potential existence of a public health hazard, or within 48 hours for any other violation or situation that may pose a risk to public health.</p> <p>(NOTE: See Appendix 13-7 for required notifications.)</p> <p>(NOTE: This checklist is equivalent to the Federal.)</p> |

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| <p align="center"><b>REGULATORY<br/>REQUIREMENTS:</b></p>   | <p align="center"><b>REVIEWER CHECKS:</b><br/> <b>March 2010</b></p>  |  |
| <p><b>COMMUNITY WATER<br/>SYSTEMS</b></p> <p><b>WQ.35.</b><br/>Standards</p> <p><b>WQ.35.1.NY.</b>      [Moved<br/>March 2005].</p> | <p>(NOTE: The requirement for certified water treatment plant operators and water distribution system operators is moved to WQ.6.1.NY.)</p> |  |

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| <p><b>COMMUNITY WATER SYSTEMS</b></p> <p><b>WQ.40.<br/>Monitoring/Sampling</b></p> <p><b>WQ.40.1.NY.</b> Minimum monitoring standards for asbestos must be met (10 NYCRR 5-1.52, Table 8A) [Revised January 1998].</p> <p><b>WQ.40.2.NY.</b> Minimum monitoring standards for specific inorganic chemicals must be met (10 NYCRR 5-1.52, Table 8B) [Added January 1998].</p> | <p>Verify that water systems vulnerable to asbestos contamination due to source water only, conduct monitoring as follows:</p> <ul style="list-style-type: none"> <li>- groundwater, collect a minimum of one sample at each entry point to the distribution system representative of each well after treatment</li> <li>- surface water, collect a minimum of one sample at each entry point to the distribution system after any application of treatment or in the distribution system at a point which is representative of each source after treatment.</li> </ul> <p>Verify that water systems vulnerable to asbestos contamination due to source water and corrosion of asbestos cement pipe or corrosion of asbestos cement pipe collect one sample at a tap served by the asbestos cement pipe and under conditions when asbestos contamination is most likely to occur.</p> <p>Verify that water systems that exceed the MCL for asbestos, sample for asbestos quarterly thereafter beginning in the next quarter after the violation occurred.</p> <p>(NOTE: The Department may decrease the quarterly monitoring requirement to the initial sampling requirement provided that it is determined that the system is reliably and consistently below the MCL on the basis of a minimum of two quarterly groundwater samples and a minimum of four quarterly samples for surface water.)</p> <p>Verify that water systems which do not exceed the MCL, sample for asbestos thereafter at the rate of one sample every 9 yr.</p> <p>(NOTE: The following regulations apply to the monitoring requirements for arsenic, barium, cadmium, chromium, mercury, selenium, and fluoride only.)</p> <p>Verify that repeat monitoring is conducted as follows:</p> <ul style="list-style-type: none"> <li>- if greater than MCL, one sample quarterly</li> <li>- if less than MCL: <ul style="list-style-type: none"> <li>- for groundwater systems, one sample per entry point every 3 yr</li> <li>- for surface only or surface and groundwater systems, one sample per entry point per year.</li> </ul> </li> </ul> <p>(NOTE: For both types of water sources, the system must take each sample at the sampling point unless conditions make another sampling point more representative of each source or treatment plant. If a system draws water from</p> |

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| <p><b>WQ.40.3.NY.</b> Community water systems must not exceed the MCL for total trihalomethanes (10 NYCRR 5-1.52, Tables 3 and 9A) [Citation Revised January 1998].</p> <p><b>WQ.40.4.NY.</b> Minimum monitoring standards for general organic chemicals must be met (10 NYCRR 5-1.52, Tables 3 and 9B) [Added January 1998].</p> | <p>more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions when water is representative of all sources.)</p> <p>Verify that, if concentrations of arsenic, barium, cadmium, chromium, fluoride, mercury or selenium exceed the MCL, the Department requires the collection of an additional sample are collected as soon as possible but not to exceed 2 weeks.</p> <p>(NOTE: The average of the initial and confirmation sample contaminant concentration at each sampling point is used to determine compliance with the MCL.)</p> <p>Determine whether the facility has a community water system that serves 10,000 or more persons and the water source receives chlorination.</p> <p>Verify that the community water system monitors for total trihalomethanes as follows:</p> <ul style="list-style-type: none"> <li>- four samples collected per quarter per disinfection station</li> <li>- at least 25 percent of the quarterly samples are obtained at the distribution points reflecting maximum residence time</li> <li>- remaining samples are taken at representative distribution points</li> <li>- all samples for a quarter are obtained on the same day.</li> </ul> <p>Verify that the community water systems do not exceed a total trihalomethanes level of 0.10 mg/L.</p> <p>Verify that the results of all analyses are arithmetically averaged per quarter and reported to the state within 30 days of receipt of the analyses.</p> <p>Verify that the community water system does not have an MCL violation in which the total trihalomethanes average of the four most recent sets of quarterly samples (12-mo running average) exceeds 0.10 mg/L beginning 1 yr after initial sampling.</p> <p>(NOTE: The monitoring for total trihalomethanes in community water systems that serve fewer than 10,000 persons and noncommunity water systems is at the state's discretion.)</p> <p>(NOTE: Principle organic contaminants are listed in Appendix 13-4.)</p> <p>Verify that community and NTNC water systems monitor for POCs and vinyl chloride as follows:</p> <ul style="list-style-type: none"> <li>- if POCs are detected, quarterly monitoring</li> <li>- if POCs are not detected but the system is vulnerable to contamination, annual monitoring.</li> </ul> |



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| <p><b>WQ.40.5.NY.</b> Community water systems must not exceed the MCLs for radiological contaminants (10 NYCRR 5-1.52, Table 7) [Citation Revised January 1998].</p>  | <p>Verify that community or NTNC water systems that meet the following criteria monitor for POCs and vinyl chloride once every 6 yr:</p> <ul style="list-style-type: none"> <li>- serve fewer than 3300 persons</li> <li>- POCs were not initially detected</li> <li>- the system is invulnerable to contamination.</li> </ul> <p>Verify that the sampling location of each groundwater supply source is between the individual well and at or before the first service connection and before mixing with other sources, unless otherwise specified by the state.</p> <p>Verify that water systems sample surface water sources at points in the distribution systems representative of each source or at an entry point or points to the distribution system after any water treatment.</p> <p>Verify that systems that monitor annually for POCs and vinyl chloride, monitor during the quarter that previously yielded the highest analytical result.</p> <p>(NOTE: Monitoring for unspecified organic contaminants is at the state's discretion.)</p> <p>Verify that community water systems do not have a combined radium-226 and radium-228 level that exceeds 5 pCi/L.</p> <p>Verify that community water systems do not have a gross alpha activity (including radium-26 but excluding radon and uranium) that exceeds 15 pCi/L.</p> <p>Verify that community water systems using surface water and serving more than 100,000 people do not have a beta particle and photon radioactivity from manmade radionuclides that exceeds 4 mrem/yr as the annual dose equivalent to the total body or any internal organ.</p> <p>Verify that community water systems do not have a MCL violation in which the annual composite of four quarterly samples or the average of the analysis of four quarterly samples exceeds the MCL levels.</p> <p>(NOTE: The Department determines the concentration capable of producing 4 mrem/ yr.)</p> |
| <p><b>WQ.40.6.NY.</b> Community water systems must meet specific monitoring frequencies for radium-226, radium-228, and gross alpha particle activities (10 NYCRR</p> | <p>Verify that community water systems meet one of the following monitoring frequencies for combined radium-226 and radium-228 and gross alpha particle activity:</p> <ul style="list-style-type: none"> <li>- once every 4 yr</li> <li>- an annual composite of quarterly samples</li> </ul>  |

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| <p>5-1.52, Table 12) [Citation Revised January 1998].</p> <p><b>WQ.40.7.NY.</b> Community water systems must meet specific monitoring frequencies for beta particle activity and photon radioactivity from manmade radionuclides (10 NYCRR 5-1.52, Table 12) [Citation Revised January 1998].</p> | <p>- four quarterly samples.</p> <p>Verify that community water systems that substitute gross alpha particle activity for the required radium-226 and radium-228 analysis do not have a gross alpha particle activity that exceeds 5 pCi/L at a 95 percent confidence level.</p> <p>Verify that community water systems with a gross alpha particle activity that exceeds 5 pCi/L, analyze the same or equivalent sample for radium-226.</p> <p>Verify that community water systems that have a radium-226 concentration that exceeds 3 pCi/L, analyze the same or equivalent sample for radium-228.</p> <p>Verify that systems that exceed the average annual MCL for gross alpha particle activity or total radium continue monitoring at quarterly intervals until the annual average concentration no longer exceeds the MCL, or until a monitoring schedule is in effect.</p> <p>Verify that community water systems which serve over 100,000 people and utilize surface water sources, or groundwater directly influenced by surface water sources, meet one of the following monitoring frequency for beta particle and photon radioactivity from manmade radionuclides:</p> <ul style="list-style-type: none"> <li>- once every 4 yr</li> <li>- an annual composite of quarterly samples</li> <li>- four quarterly samples.</li> </ul> <p>Verify that, if the gross beta particle activity exceeds 50 pCi/L, an analysis of the sample is performed to identify the major radioactive constituents present and that the appropriate organ and total body doses are calculated to determine compliance.</p> <p>Verify that community water systems which the state has determined are using water contaminated by effluents from nuclear facilities meet the following monitoring standards:</p> <ul style="list-style-type: none"> <li>- quarterly monitoring for gross beta particle and iodine-131 radioactivity</li> <li>- annual monitoring for strontium-90 and tritium.</li> </ul> <p>(NOTE: Monitoring compliance is assumed without further analysis if the following average annual concentrations are met:</p> <ul style="list-style-type: none"> <li>- the gross beta particle activity is less than 50 pCi/L</li> <li>- tritium is less than 20,000 pCi/L</li> <li>- strontium-90 is less than 8 pCi/L</li> <li>- if both tritium and strontium-90 are present, the sums of their annual dose equivalents to bone marrow do not exceed 4 mrem/yr.)</li> </ul> <p>(NOTE: The monitoring frequencies for community water systems that utilize only groundwater sources or any community water system that serves 100,000 or</p> |

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|  | fewer persons is at the state's discretion.) |

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| <p><b>COMMUNITY WATER SYSTEMS</b></p> <p><b>WQ.45.<br/>Notification and Reporting Requirements</b></p> <p><b>WQ.45.1.NY.</b> Community water systems that exceed an MCL, have an MCL violation, fail to comply with a monitoring, treatment, or testing regulation, or have a variance/exemption in effect must meet specific notification standards (10 NYCRR 5-1.52, Table 13) [Revised January 1998].</p> | <p>(NOTE: See Appendix 13-7 for specific notification requirements.)</p> <p>Verify that suppliers of water for community water systems notify all new billing units or new service connections before or at the time service begins of any of the following:</p> <ul style="list-style-type: none"> <li>- outstanding MCL violations</li> <li>- failures to comply with a prescribed treatment technique and/or failure to meet a variance or exemption schedule.</li> </ul> <p>Verify that community water systems which fail to meet monitoring requirements, fail to use applicable testing procedure, have a variance or exemption in effect, or have a total trihalomethane violation notify the public:</p> <ul style="list-style-type: none"> <li>- within 3 mo</li> <li>- by hand delivery, repeated every 3 mo for the duration of the failure or the variance/exemption</li> <li>- by continuous posting for the duration of the failure or the variance/exemption.</li> </ul> <p>Verify that community water systems meet the following sodium notification standards:</p> <ul style="list-style-type: none"> <li>- the state is notified if sodium levels exceed 20 mg/L</li> <li>- the consumer is notified within 14 days if a sodium level exceeds 270 mg/L.</li> </ul> |

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| <b>COMMUNITY WATER SYSTEMS</b><br><br><b>WQ.50.</b><br><b>Lead and Copper</b>                |          |   |
| <b>WQ.50.1.NY.</b><br>January 1999].   | [Deleted | (NOTE: This checklist item duplicated requirements in the Federal.) |
| <b>WQ.50.2.NY.</b><br>January 1999].   | [Deleted | (NOTE: This checklist item duplicated requirements in the Federal.) |
| <b>WQ.50.3.NY.</b><br>January 1999].   | [Deleted | (NOTE: This checklist item duplicated requirements in the Federal.) |
| <b>WQ.50.4.NY.</b><br>January 1999].   | [Deleted | (NOTE: This checklist item duplicated requirements in the Federal.) |
| <b>WQ.50.5.NY.</b><br>January 1999].   | [Deleted | (NOTE: This checklist item duplicated requirements in the Federal.) |



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| <b>NONCOMMUNITY WATER SYSTEMS</b><br><br><b>WQ.75.</b><br><b>Notification and Reporting Requirements</b><br><br><b>WQ.75.1.NY.</b><br>Noncommunity water systems that exceed an MCL, have an MCL violation, fail to comply with a monitoring, treatment, or testing regulation, or have a variance/exemption in effect must meet specific notification standards (10 NYCRR 5-1.52, Table 13) [Revised January 1998]. | <p>(NOTE: See Appendix 13-7 for specific notification requirements.)</p> <p>Verify that noncommunity water systems with an outstanding MCL violation, a failure to comply with a prescribed treatment technique, or a failure to meet a variance or exemption schedule have met consumer and public notification standards or have met the following alternative:</p> <ul style="list-style-type: none"> <li>- public notified within 14 days of a failure</li> <li>- public notified within 48 h for a public health hazard</li> <li>- notification conducted by hand delivery every 3 mo while the violation or failure continues</li> <li>- continuous posting in conspicuous places in the area served by the system for the duration of the violation or failure.</li> </ul> <p>(NOTE: Instead of consumer and public notification, noncommunity water systems may give notice within 3 mo of the granting of a variance or exemption, failure to meet monitoring requirements, and/or failure to use applicable testing procedure in the following manner:</p> <ul style="list-style-type: none"> <li>- by hand delivery repeated every 3 mo for as long as the variance or exemption is in effect or the failure continues</li> <li>- by continuous posting in conspicuous places in the area served by the system for as long as the variance or exemption is in effect or the failure continues.)</li> </ul> |

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| <p><b>NONTRANSIENT<br/>NONCOMMUNITY<br/>WATER SYSTEMS<br/>(NTNC)</b></p> <p><b>WQ.77.<br/>Monitoring/Sampling</b></p> <p><b>WQ.77.1.NY.</b> [Deleted January 1999].</p> <p><b>WQ.77.2.NY.</b> Minimum monitoring standards for specific inorganic chemicals must be met (10 NYCRR 5-1.52, Table 8B) [Added January 1998].</p> <p><b>WQ.77.3.NY.</b> Minimum monitoring standards for general organic chemicals must be met (10 NYCRR 5-1.52, Tables 3 and 9B) [Added January 1998].</p> | <p>(NOTE: This checklist item duplicated requirements in the U.S. TEAM Guide.)</p> <p>(NOTE: The following regulations apply to the monitoring requirements for arsenic, barium, cadmium, chromium, mercury, selenium, and fluoride only.)</p> <p>Verify that repeat monitoring is conducted as follows:</p> <ul style="list-style-type: none"> <li>- if greater than MCL, one sample quarterly</li> <li>- if less than MCL: <ul style="list-style-type: none"> <li>- for groundwater systems, one sample per entry point every 3 yr</li> <li>- for surface only or surface and groundwater systems, one sample per entry point per year.</li> </ul> </li> </ul> <p>(NOTE: For both types of water sources, the system must take each sample at the sampling point unless conditions make another sampling point more representative of each source or treatment plant. If a system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions when water is representative of all sources.)</p> <p>Verify that, if concentrations of arsenic, barium, cadmium, chromium, fluoride, mercury or selenium exceed the MCL, the Department requires the collection of an additional sample are collected as soon as possible but not to exceed 2 weeks.</p> <p>(NOTE: The average of the initial and confirmation sample contaminant concentration at each sampling point is used to determine compliance with the MCL.)</p> <p>(NOTE: Principle organic contaminants are listed in Appendix 13-4.)</p> <p>Verify that community and NTNC water systems monitor for POCs and vinyl chloride as follows:</p> <ul style="list-style-type: none"> <li>- if POCs are detected, quarterly monitoring</li> <li>- if POCs are not detected but the system is vulnerable to contamination,</li> </ul> |



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|  | <p>annual monitoring.</p> <p>Verify that community or NTNC water systems that meet the following criteria monitor for POCs and vinyl chloride once every 6 yr:</p> <ul style="list-style-type: none"> <li>- serve fewer than 3300 persons</li> <li>- POCs were not initially detected</li> <li>- the system is invulnerable to contamination.</li> </ul> <p>Verify that the sampling location of each groundwater supply source is between the individual well and at or before the first service connection and before mixing with other sources, unless otherwise specified by the state.</p> <p>Verify that water systems sample surface water sources at points in the distribution systems representative of each source or at an entry point or points to the distribution system after any water treatment.</p> <p>Verify that systems that monitor annually for POCs and vinyl chloride, monitor during the quarter that previously yielded the highest analytical result.</p> <p>(NOTE: Monitoring for unspecified organic contaminants is at the state's discretion.)</p> |

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| <b>NONTRANSIENT<br/>NONCOMMUNITY<br/>WATER SYSTEMS<br/>(NTNC)</b><br><br><b>WQ.78.<br/>Lead and Copper</b> |          |  |
| <b>WQ.78.1.NY.</b><br>January 1999].   | [Deleted | (NOTE: This checklist item duplicated Federal requirements.) |
| <b>WQ.78.2.NY.</b><br>January 1999].   | [Deleted | (NOTE: This checklist item duplicated Federal requirements.) |
| <b>WQ.78.3.NY.</b><br>January 1999].   | [Deleted | (NOTE: This checklist item duplicated Federal requirements.) |
| <b>WQ.78.4.NY.</b><br>January 1999].   | [Deleted | (NOTE: This checklist item duplicated Federal requirements.) |
| <b>WQ.78.5.NY.</b><br>January 1999].   | [Deleted | (NOTE: This checklist item duplicated Federal requirements.) |

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| <p><b>WQ.85.</b></p> <p><b>STATE-SPECIFIC CATEGORIES OF WATER SYSTEMS</b></p> <p><b>WQ.85.1.NY.</b> Individual water supply systems must meet design, construction, and maintenance standards (10 NYCRR 75.4) [Revised January 1998].</p> | <p>(NOTE: These standards represent the minimum protection for any water supply system in the State of New York.)</p> <p>Verify that individual water supply systems designed, constructed and maintained in accordance with the standards of the State Commissioner of Health as set forth in 10 NYCRR Appendix 5-B.</p> <p>Verify that all treatment devices for an individual water supply are designed, constructed, installed and maintained in accordance with standards acceptable to the State Commissioner of Health as set forth in 10 NYCRR Appendix 75-B.</p> |

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| <p><b>WQ.90.</b></p> <p><b>DRINKING WATER WELL</b></p> <p><b>WQ.90.1.NY.</b> Permits may be required for the construction or the abandonment of a groundwater well (10 NYCRR 5-2.2, 5-2.4, and 5-2.14) [Citation Revised January 1998; Citation Revised March 2006; Revised March 2008].</p> <p><b>WQ.90.2.NY.</b> Specific requirements must be met after the well construction is completed (10 NYCRR 5-2.9) [Added January 1998].</p> <p><b>WQ.90.3.NY.</b> The abandonment of a well must satisfy with specific requirements (10 NYCRR 5-</p> | <p>(NOTE: These requirements:</p> <ul style="list-style-type: none"> <li>- apply within a county health district, a part-county health district, and a city having a city health department, when adopted by the appropriate local authority and in those state district health areas designated by the state Commissioner of Health</li> <li>- apply to the location, construction and abandonment of water wells used for drinking, culinary and food processing purposes other than municipal or public sources.)</li> </ul> <p>(NOTE: The following also must comply with all other applicable State and local regulations:</p> <ul style="list-style-type: none"> <li>- the distribution of water beyond the point of discharge from the storage or pressure tank, or beyond the point of discharge from the pump if no tank is employed</li> <li>- wells used or intended to be used as a source of water supply for public water supply systems, or to any pump, well, or other equipment used temporarily for de-watering purposes.)</li> </ul> <p>Verify that no wells are constructed or abandoned prior to obtaining a permit from the permit issuing official when required.</p> <p>(NOTE: See WQ.90.1.NY. for applicability.)</p> <p>Verify that, within 30 days of the completion of water well construction, the permit applicant:</p> <ul style="list-style-type: none"> <li>- pumps the well until the water is clear</li> <li>- disinfects the well in accordance with the requirements of the permit issuing official</li> <li>- submits a well log to the permit issuing official.</li> </ul> <p>(NOTE: The well log must specify the well location, depth and diameter, formations penetrated, casing length, extent and nature of grouting, well output tests and associated water levels, and any other information required by the permit issuing official. In addition, analytical data of the water quality associated with such well must be submitted when available.)</p> <p>(NOTE: See WQ.90.1.NY. for applicability.)</p> <p>Verify that every abandoned well is sealed or closed to protect the aquifer from</p> |



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| <p><b>WQ.90.6.NY.</b> Water wells must meet construction and maintenance standards (10 NYCRR Appendix 5-B.5) [Added March 2006].</p> | <p>of water withdrawal, and periodically during drawdown, and recovery periods</p> <ul style="list-style-type: none"> <li>- the water discharged during a yield test is discharged in a manner that avoids short circuiting of the water back into the aquifer</li> <li>- for wells that have been subjected to hydrofracturing the yield test does not commence until redevelopment has been completed and, as a minimum, until the volume of water pumped/discharged into the aquifer has been removed from the well</li> <li>- the well yield determined for new wells is recorded on the Well Completion Report form submitted for that well to the New York State Department of Environmental Conservation.</li> </ul> <p>(NOTE: This checklist item applies to water wells used for drinking, culinary and/or food processing purposes.)</p> <p>Verify that all water supply system equipment is easily accessible for maintenance or repair.</p> <p>Verify that a pump is installed so that there are no unprotected openings into the interior of the pump or the well casing.</p> <p>Verify that a drop pipe meets the following requirements:</p> <ul style="list-style-type: none"> <li>- a continuous unspliced length, except where spliced and adequately joined to accommodate use of a check valve or where spliced and adequately joined to support a depth extension on an existing well pump</li> <li>- of plastic pipe approved for use with drinking water with a minimum working pressure of 160 pounds per square inch containing a label or imprint indicating compliance with NSF or UL; or threaded and coupled schedule 80 or heavier PVC pipe containing a label or imprint indicating compliance with NSF or UL; or threaded and coupled galvanized steel, stainless steel or copper pipe</li> <li>- sufficiently sized and installed to accommodate potential working stresses considering well depth, pumping level, pump size, and pump setting.</li> </ul> <p>Verify that a hand pump has a closed, downward facing, screened spout and a sealed pump rod packing assembly.</p> <p>Verify that a weep hole is installed in a hand pump discharge riser pipe below the frost line to protect the riser pipe and pump head from freezing.</p> <p>Verify that a casing vent is provided on all well caps and seals, except for those used on double pipe-packer jet installations.</p> <p>Verify that a vent is screened, downward facing, and terminates at least 12 inches above grade or six inches above the floor of a well house.</p> |

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| <p><b>WQ.90.7.NY.</b> Water wells serving public water systems must meet additional location standards (10 NYCRR Appendix 5-D.2) [Added March 2006].</p> <p><b>WQ.90.8.NY.</b> Water wells serving public water systems must have secure well caps (10 NYCRR Appendix 5-D.5) [Added March 2006].</p> | <p>Verify that vent screening meets the following conditions:</p> <ul style="list-style-type: none"> <li>- 20 to 30 mesh per inch screen</li> <li>- does not reduce the vent open area by more than 50 percent</li> <li>- stainless steel or other non-corrodible material.</li> </ul> <p>Verify that well caps and seals are tightly secured to the well casing, watertight, vermin- proof, and provide venting.</p> <p>Verify that split caps are not used.</p> <p>Verify that only lubricants with a label indicating compliance as USDA, USFDA, or NSF approved food contact grade formulations are used as submersible pump motor and vertical turbine shaft lubricants.</p> <p>Verify that wells serving public water systems are located such that the owner of the water system possesses legal title to lands within 100 ft of the well and the owner controls by ownership, lease, easement or other legally enforceable arrangement the land use activities within 200' of the well.</p> <p>Verify that hydrogeologic evaluations and source water assessments are used to determine appropriate separation from potential contaminant sources.</p> <p>Verify that, where no evaluations are available, the minimum separation distances are those specified for public water system wells in Appendix 13-13.</p> <p>NOTE: Where the ownership/control distances or separation distances cannot be achieved, use of such well location may be allowed by the Department or local health department having jurisdiction.)</p> <p>Verify that well caps and seals are tightly secured to the well casing, watertight, vermin-proof, and provide venting.</p> <p>Verify that split caps are not used.</p> <p>Verify that well caps are lockable and secured with sturdy, weatherproof locks or otherwise secured to prevent tampering.</p> |

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| <p><b>WQ.100.</b></p> <p><b>MISCELLANEOUS WATER WELL</b></p> <p><b>WQ.100.1.NY.</b> Wells in the Counties of Kings, Queens, Nassau or Suffolk for use other than a public water supply must comply with specific standards (6 NYCRR 602.1) [Added January 1998; Citation Revised March 2008].</p> | <p>(NOTE: This requirement applies to the all wells in the County of Kings, Queens, Nassau or Suffolk used to withdraw water for any purpose, other than for a public water supply.)</p> <p>Verify that, prior to the installation or operation of any well, a permit is obtained pursuant to 6 NYCRR 602 when the total capacity of such well or wells on any one property is in excess of 45 gal/min (or 64,800 gal/day).</p> <p>(NOTE: This requirement includes temporary or permanent dewatering wells.)</p> <p>(NOTE: Well capacity, except for free-flowing wells, is defined as the capacity of the pumps installed, not the actual contemplated draft.)</p> |



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| <p><b>WQ.115.</b></p> <p><b>WATER QUALITY STANDARDS</b></p> <p><b>WQ.115.1.NY.</b> Sources of water supply must be protected from contamination (10 NYCRR 170.2 and 170.4) [Revised January 1998].</p> <p><b>WQ.115.2.NY.</b> Surface and groundwaters of the state must meet specific water quality standards (6 NYCRR 701.1, 703.2, 703.3, and 703.5) [Revised January 1999; Revised March 2009].</p> <p><b>WQ.115.3.NY.</b> Discharges from a point source, outlet, or any other discharge within the meaning of the Environmental Conservation Law fresh groundwaters (Class GA waters) must meet specific</p> | <p>(NOTE: This requirement applies throughout the entire State of New York, except the City of New York, and applies to all sources of water supply in the State and classified as Classes AA, A, A-special (International boundary waters), AA-special (Lake Champlain drainage basin), AA-special (upper Hudson River drainage basin) and GA.)</p> <p>Verify that every source of water supply meets the standards of quality set forth in this section of the protocol and are protected from and free of contamination.</p> <p>(See Appendix 13-9 for the standards of raw water quality.)</p> <p>Verify that the discharge of sewage, industrial waste or other wastes does not cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge (see Appendix 13-13 for description of water classifications).</p> <p>Verify that the facility does not cause surface or groundwaters of the state to exceed the narrative water quality standards found in Appendix 13-10.</p> <p>Verify that the facility does not cause surface or groundwaters of the state to exceed the water quality standards for pH, dissolved oxygen, dissolved solids, odor, color, and turbidity found in Appendix 13-11.</p> <p>Verify that the facility does not cause surface or groundwaters of the state to exceed the water quality standards for coliform or fecal coliform found in Appendix 13-14.</p> <p>Verify that the facility does not cause surface or groundwaters of the state to exceed the water quality standards for specific substances or groups of substances found in 6 NYCRR 703.5.</p> <p>(NOTE: These requirements do not apply to the following activities:</p> <ul style="list-style-type: none"> <li>- discharge of sewage without the admixture of industrial waste or other wastes where all of the following conditions are met:</li> <li>- a disposal system, point source, or outlet consists of a subsurface sewage disposal system designed, constructed, and maintained in accordance with guidelines and standards satisfactory to the Department</li> </ul> |

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| <b>REGULATORY<br/>REQUIREMENTS:</b>   | <b>REVIEWER CHECKS:<br/>March 2010</b>  |
|---|---|
| <p>effluent standards (6 NYCRR 702.16(c)(1), 702.21 and 703.6) [Revised January 1998; Revised January 1999; Revised March 2008; Citation Revised March 2009].</p> | <ul style="list-style-type: none"> <li>- monitoring facilities are used in accordance with requirements as specified by the Department</li> <li>- the disposal system is designed to discharge, and discharges, less than 30,000 gal/day</li> <li>- normally accepted agricultural practice of using chemicals and fertilizers for growing of crops for human and animal consumption</li> <li>- waste management systems that employ land application techniques and have renovative capabilities provided it has been demonstrated to the satisfaction of the Commissioner that all of the following conditions are met: <ul style="list-style-type: none"> <li>- there will be no actual or potential public health hazard</li> <li>- applicable water quality standards will be met in saturated zones</li> <li>- applicable water quality standards will not be contravened in any adjacent waters of the state.)</li> </ul> </li> </ul> <p>(NOTE: Unless a demonstration is made to the contrary, it shall be presumed that a discharge to the ground or unsaturated zone is a discharge to groundwater.)</p> <p>Verify that the groundwater effluents do not exceed the limitations specified in Appendix 13-12.</p> <p>Verify that, in addition to the chemical characteristics of Appendix 13-12, coliform or pathogenic organisms are not discharged in amounts sufficient to render groundwaters detrimental to public health, safety or welfare.</p> <p>(NOTE: For those substances not included in Appendix 13-12 and for which a guidance value has been derived, the groundwater effluent limitation is equal to the guidance value. The guidance value is equal to the value of a specific maximum contaminant level (MCL). For a substance belonging to any of the principal organic contaminant classes and for which there is no specific MCL, the guidance value is 5 µg/L or a less stringent value as determined by the Commissioner.)</p> <p>(NOTE: Groundwater effluent standards or limitations will be incorporated into state Pollutant Elimination System (SPDES) permits for discharges to groundwater, when applicable. The department may establish additional groundwater effluent limitations.)</p> |

## Appendix 13-1

### Inorganic Chemical Maximum Contaminant Levels (MCLs)

(Source: 10 NYCRR 5-1.52, Table 1) [Citation Revised January 1998; Revised January 1999]

(NOTE: Fluoride MCL is 2.2 ppm, Federal standard is 4.0 ppm.)

| Contaminants              | (mg/l) <sup>4</sup>                                       |
|---------------------------|---|
| Asbestos                  | 7.0 million fiber/liter (MFL)<br>(Longer than 10 microns) |
| Antimony                  | 0.006   |
| Arsenic                   | 0.05  |
| Barium                    | 2.00  |
| Beryllium                 | 0.004   |
| Cadmium                   | 0.05  |
| Chromium                  | 0.10  |
| Cyanide (as free Cyanide) | 0.2   |
| Mercury                   | 0.002   |
| Selenium                  | 0.05  |
| Silver                    | 0.1   |
| Thallium                  | 0.002   |
| Fluoride                  | 2.2   |
| Chloride                  | 250.0   |
| Iron                      | 0.3 <sup>2</sup>  |
| Manganese                 | 0.3 <sup>2</sup>  |
| Sodium                    | No designated limits <sup>3</sup>                         |
| Sulfate                   | 250.0   |
| Zinc                      | 5.0   |
| Color                     | 15 Units  |
| Odor                      | 3 Units   |

<sup>2</sup> If iron and manganese are present, the total concentration of both should not exceed 0.5 mg/l. Higher levels may be allowed by the State when justified by the supplier of water.

<sup>3</sup> Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

<sup>4</sup> mg/l = milligrams per liter.

## Appendix 13-2

### Organic Chemical Maximum Contaminant Levels (MCLs)

(Source: 10 NYCRR 5-1.52, Table 3) [Citation Revised January 1998; Revised January 1999; Revised March 2004]

(NOTE: 2,4-D MCL is 0.05 ppm, while Federal standard is 0.07 ppm. 2,4,5-TP (Silvex) MCL is 0.1 ppm while Federal standard is 0.05 ppm. New York also includes propylene glycol MCL of 1.0 ppm.)

| Contaminant                           | MCL(mg/l)  | Type of Water System             |
|---------------------------------------|------------|----------------------------------|
| General organic chemicals             |            | Community, NTNC and Noncommunity |
| Principal organic contaminant (POC)   | 0.005      |                                  |
| Unspecified organic contaminant (UOC) | 0.05       |                                  |
| Total POCs and UOCs                   | 0.1        |                                  |
| Trihalomethanes <sup>2</sup>          |            | Community and Noncommunity       |
| Total trihalomethanes <sup>1</sup>    | 0.10       |                                  |
| Group I Contaminants                  | MCL (mg/l) | Type of Water System             |
| Alachlor                              | 0.002      | Community, NTNC and Noncommunity |
| Aldicarb                              | 0.003      |                                  |
| Aldicarb sulfone                      | 0.002      |                                  |
| Aldicarb sulfoxide                    | 0.004      |                                  |
| Atrazine                              | 0.003      |                                  |
| Benzo(a)pyrene                        | 0.0002     |                                  |
| Carbofuran                            | 0.04       |                                  |
| Chlordane                             | 0.002      |                                  |
| Di(2-ethylhexyl)phthalate             | 0.006      |                                  |
| Dibromochloropropane(DBCP)            | 0.0002     |                                  |
| 2, 4-D                                | 0.05       |                                  |
| Dinoseb                               | 0.007      |                                  |
| Diquat                                | 0.02       |                                  |
| Endrin                                | 0.002      |                                  |
| Ethylene dibromide(EDB)               | 0.00005    |                                  |
| Heptachlor                            | 0.0004     |                                  |
| Heptachlor epoxide                    | 0.0002     |                                  |
| Hexachlorobenzene                     | 0.001      |                                  |
| Lindane                               | 0.0002     |                                  |
| Methoxychlor                          | 0.04       |                                  |
| Pentachlorophenol                     | 0.001      |                                  |
| Polychlorinated biphenyls (PCBs)      | 0.0005     |                                  |
| Propylene glycol                      | 1.0        |                                  |
| Simazine                              | 0.004      |                                  |
| Toxaphene                             | 0.003      |                                  |
| 2, 4, 5-TP (Silvex)                   | 0.01       |                                  |
| 2, 3, 7, 8-TCDD (dioxin)              | 0.00000003 |                                  |
| Vinyl Chloride                        | 0.002      |                                  |

<sup>1</sup> Effective one yr after beginning sampling according to the minimum monitoring requirements.

<sup>2</sup> The State may require a supplier of water to monitor for MTP at a frequency specified by the State.

### Appendix 13-3

#### Organic Chemicals--Pesticides, Dioxin, PCBs

(Source: 10 NYCRR 5-1.52, Table 9C) [Citation Revised January 1998]

| <u>Group 1 Chemicals</u>         | <u>Group 2 Chemicals</u>   |
|----------------------------------|----------------------------|
| Alachlor                         | Aldrin                     |
| Aldicarb                         | Benzo(a)pyrene             |
| Aldicarb sulfone                 | Butachlor                  |
| Aldicarb sulfoxide               | Carbaryl                   |
| Atrazine                         | Dalapon                    |
| Carbofuran                       | Di(2-ethylhexyl)adipate    |
| Chlordane                        | Di(2-ethylhexyl)phthalates |
| Dibromochloropropane (DPCP)      | Dicamba                    |
| 2,4-D                            | Dieldrin                   |
| Endrin                           | Dinoseb                    |
| Ethylene dibromide (EDB)         | Diquat                     |
| Heptachlor                       | Endothall                  |
| Heptachlor epoxide               | Glyphosate                 |
| Lindane                          | Hexachlorobenzene          |
| Methoxychlor                     | Hexachlorocyclopentadiene  |
| Pentachlorophenol                | 3-Hydroxycarbofuran        |
| Polychlorinated biphenyls (PCBs) | Methomyl                   |
| Toxaphene                        | Metholachlor               |
| 2,4,5-TP (Silvex)                | Metricbuzin                |
|                                  | Oxamyl (vydate)            |
|                                  | Pichloram                  |
|                                  | Propachlor                 |
|                                  | Simazine                   |
|                                  | 2,3,7,8-TCDD (Dioxin)      |

## Appendix 13-4

### Principal Organic Contaminants (POCs)

(Source: 10 NYCRR 5-1.52, Table 9D) [Citation Revised January 1998; Revised January 1999]

|                          |                           |
|--------------------------|---------------------------|
| benzene                  | 1,1-dichloropropene       |
| bromobenzene             | cis-1,3-dichloropropene   |
| bromochloromethane       | trans-1,3-dichloropropene |
| bromomethane             | ethylbenzene              |
| n-butylbenzene           | hexachlorobutadiene       |
| sec-butylbenzene         | isopropylbenzene          |
| tert-butylbenzene        | p-isopropyltoluene        |
| carbon tetrachloride     | methylene chloride        |
| chlorobenzene            | n-propylbenzene           |
| chloroethane             | styrene                   |
| chloromethane            | 1,1,1,2-tetrachloroethane |
| 2-chlorotoluene          | 1,1,2,2-tetrachloroethane |
| 4-chlorotoluene          | tetrachloroethene         |
| dibromomethane           | Toluene                   |
| 1,2-dichlorobenzene      | 1,2,3-trichlorobenzene    |
| 1,3-dichlorobenzene      | 1,2,4-trichlorobenzene    |
| 1,4-dichlorobenzene      | 1,1,1-trichloroethane     |
| dichlorodifluoromethane  | 1,1,2-trichloroethane     |
| 1,1-dichloroethane       | trichloroethene           |
| 1,2-dichloroethane       | trichlorofluoromethane    |
| 1,1-dichloroethane       | 1,2,3-trichloropropane    |
| cis-1,2-dichloroethene   | 1,2,4-trimethylbenzene    |
| trans-1,2-dichloroethene | 1,3,5-trimethylbenzene    |
| 1,2-dichloropropane      | m-xylene                  |
| 1,3-dichloropropane      | o-xylene                  |
| 2,2-dichloropropane      | p-xylene                  |

## **Appendix 13-5**

**Table 1**

**CT Values (CT<sub>99.9</sub>) for 99.9 Percent Inactivation of *Giardia lamblia* Cysts  
by Free Chlorine at 0.5 °C or Lower\***

(Source: 10 NYCRR 5-1.52, Table 14A) [Citation Revised January 1998; Deleted March 2003]

## **Appendix 13-6**

### **Number of Sampling Sites for Water Quality Parameter Monitoring** [Deleted March 2003]



## Appendix 13-7

### Required Notifications

(Source: 10 NYCRR 5-1, Table 13) [Revised January 1998; Revised January 1999; Revised March 2005]

| Contaminant/Situation<br>(Subpart 5-1 citations)  | Single sample<br>exceeds<br>MCL/MRDL                            | MCL/MRDL/TT <sup>1</sup><br>violation                   | Failure to meet<br>monitoring<br>requirements<br>and/or failure<br>to use<br>applicable<br>testing<br>procedure |
|---|---|---|---|
| Public Health Hazard<br>(section 5-1.1)   | Not applicable  | State Tier 1  | State Tier 1  |
| Escherichia coli (E. coli) (<br>section 5-1.52 tables 6 and 11)   | <sup>2</sup> State Not<br>applicable, or <sup>3</sup><br>Tier 1 | State Tier 1  | State 4 Tier 3, or<br>Tier 1  |
| Total Coliform<br>(section 5-1.52 tables 6 and 11)  | Not applicable  | <sup>4</sup> State<br><sup>5</sup> Tier 2, or<br>Tier 1 | State Tier 3, or<br>Tier 2  |
| Entry Point Turbidity monthly average<br>(section 5-1.52 tables 4 and 10)   | <sup>7</sup> State  | State Tier 2  | State Tier 3  |
| Entry Point Turbidity two day average<br>(section 5-1.52 tables 4 and 10)   | State   | State <sup>8</sup> Tier 2, or<br>Tier 1                 | State Tier 3  |
| Raw Water Turbidity<br>(section 5-1.30(d) and 5-1.52 table 10A)   | State   | State <sup>8</sup> Tier 2, or<br>Tier 1                 | State Tier 3  |
| Filtered Water Turbidity<br>Single exceedance of the maximum<br>allowable Turbidity level<br>(section 5-1.52 tables 4A and 10A) | State   | State <sup>8</sup> Tier 2, or<br>Tier 1                 | State Tier 3  |
| Filtered Water Turbidity Treatment<br>Technique violation<br>(section 5-1.52 tables 4A and 10A)                                 | Not applicable  | State Tier 2  | State Tier 3  |
| Distribution Point Turbidity (section 5-<br>1.52 tables 5, 10 and 10A)  | Not applicable  | State Tier 2  | State Tier 3  |
| <sup>9</sup> Treatment Technique violations other<br>than turbidity (section 5-1.30)  | Not applicable  | State Tier 2  | State Tier 3  |
| <sup>10</sup> Free chlorine residual less than 0.2<br>mg/L at the entry point<br>(section 5-1.30(d))                            | Not applicable  | <sup>6</sup> State                                      | Not applicable  |
| Inorganic chemicals and physical<br>characteristics listed in Tables 8A and 8B<br>(section 5-1.52 tables 1, 8A, and 8B)         | State   | State Tier 2  | State Tier 3  |
| chloride, iron, manganese, silver, sulfate,<br>and zinc (section 5-1.52 tables 1 and 8D)  | Not applicable  | State Tier 3  | State Tier 3  |
| Sodium<br>(section 5-1.52 tables 1 and 8D)  | State if the level<br>exceeds 20 mg/L                           | Tier 2 if the level<br>exceeds 270 mg/L                 | Tier 3  |
| Nitrate Nitrite Total Nitrate and Nitrite<br>(section 5-1.52 tables 2 and 8C)   | State   | State Tier 1  | State <sup>11</sup> Tier 1, or<br>Tier 3  |
| Lead and Copper<br>(sections 5-1.40 to 1.49)  | Not applicable  | State Tier 2  | State Tier 3  |
| Organic Chemicals Group 1 and 2   | State   | State Tier 2  | State Tier 3  |

| <b>Contaminant/Situation<br/>(Subpart 5-1 citations)</b>  | <b>Single sample<br/>exceeds<br/>MCL/MRDL</b> | <b>MCL/MRDL/TT<sup>1</sup><br/>violation</b> | <b>Failure to meet<br/>monitoring<br/>requirements<br/>and/or failure<br/>to use<br/>applicable<br/>testing<br/>procedure</b> |
|---|---|--|---|
| (section 5-1.52 table 9C)   |   |  |   |
| Principal Organic Contaminants<br>Unspecified Organic Contaminants Total<br>POCs and UOCs   | State   | State Tier 2                                 | State Tier 3  |
| Radiological Contaminants<br>(section 5-1.52 tables 7 and 12)   | State   | State Tier 2                                 | State Tier 3  |
| Monitoring and Control of Disinfection<br>Byproduct Precursors<br>(section 5-1.60 to 5-1.64)  | Not applicable                                | State Tier 2                                 | State Tier 3  |
| Disinfectant residuals Chlorine and<br>Chloramine<br>(section 5-1.52 tables 3A and 15)  | State   | State Tier 2                                 | State Tier 3  |
| Disinfectant residual Chlorine dioxide At<br>entry point<br>(section 5-1.52 tables 3A and 15)   | State   | State Tier 2                                 | State <sup>12</sup> Tier 3, or<br>Tier 2  |
| Disinfectant residual Chlorine dioxide In<br>distribution system<br>(section 5-1.52 tables 3A and 15)   | State   | State <sup>13</sup> Tier 1                   | State <sup>13</sup> Tier 1  |
| Disinfection byproducts Trihalomethanes<br>Haloacetic acids (Tables 3 and 9A) and<br>Bromate and Chlorite<br>(section 5-1.52 tables 1 and 8B) | Not applicable                                | State Tier 2                                 | State Tier 3  |
| Acrylamide and Epichlorohydrin<br>(section 5-1.51(j))   | Not applicable                                | State Tier 2                                 | Not applicable  |
| Operation under a variance or exemption   | Not applicable                                | Tier 3                                       | Not applicable  |
| Violation of conditions of a variance or<br>exemption   | Not applicable                                | State Tier 2                                 | Not applicable  |
| Disruption of water service of four hours<br>or more<br>(section 5-1.23(b))   | Not applicable                                | <sup>6</sup> State                           | Not applicable  |

<sup>1</sup> MCL-maximum contaminant level, MRDL-maximum residual disinfectant level, TT-treatment technique

<sup>2</sup> State notification must be made by the supplier of water within 24 hours of learning of an E. coli positive sample

<sup>3</sup> Public notification normally does not have to be issued for an E. coli positive sample prior to the results of the repeat samples. However, there may be situations where the State determines that a Tier 1 notification is necessary to protect the public health. The supplier of water must provide the Tier 1 notification no later than 24 hours after learning of the State's determination.

<sup>4</sup> Failure to test for E. coli requires a Tier 1 notification if testing is not done after any repeat sample tests positive for coliform. All other E. coli monitoring and testing procedure violations require Tier 3 notification.

<sup>5</sup> Tier 2 notification is normally required, however, there may be situations where the State determines that a Tier 1 notification is necessary to protect the public health. The supplier of water must provide the Tier 1 notification no later than 24 hours after learning of the State's determination.

<sup>6</sup> Tier 1 notification is required if the situation meets the definition of a public health hazard.

<sup>7</sup> If the daily entry point analysis exceeds one NTU, a repeat sample must be taken as soon as practicable and preferably within one hour. If the repeat sample exceeds one NTU, the supplier of water must make state notification.

<sup>8</sup> Systems must consult with the State within 24 hours after learning of the violation. Based on this consultation, the State may subsequently decide to elevate the violation from a Tier 2 to a Tier 1 notification. If consultation does not take place within the 24 hour period, the water system must distribute a Tier 1 notification no later than 48 hours after the system learns of the violation.

<sup>9</sup> These violations include the following: failure to comply with the treatment technique or monitoring requirements in section 5-1.30(b), (c), and (g) of this Subpart; failure to comply with the avoidance criteria in section 5-1.30(c) of this Subpart; and failure to install filtration or disinfection treatment facilities required by section 5-1.30 of this Subpart; failure to report to the state information required in paragraph (3) of section 5-1.72(c) of this Subpart; and failure to maintain records required in paragraph (7) of section 5-1.72(c) of this Subpart.

<sup>10</sup> Applies to systems that have surface water or groundwater directly influenced by surface water as a source and use chlorine. The system must make State notification whether the residual was restored to at least 0.2 mg/L within four hours.

<sup>11</sup> Failure to take a confirmation sample within 24 hours for nitrate or nitrite after an initial sample exceeds the MCL requires a Tier 1 notification. Other monitoring violations for nitrate or nitrite require a Tier 3 notification.

<sup>12</sup> Failure to monitor for chlorine dioxide at the entrance to the distribution system the day after exceeding the MRDL at the entrance to the distribution system requires a Tier 2 notification. Other monitoring violations for chlorine dioxide at the entrance to the distribution system require a Tier 3 notification.

<sup>13</sup> If any daily sample taken at the entrance to the distribution system exceeds the MRDL for chlorine dioxide and one or more samples taken in the distribution system the next day exceed the MRDL, Tier 1 notification is required. Failure to take the required samples in the distribution system the day after the MRDL is exceeded at the entry point also triggers Tier 1 notification.

<sup>14</sup> State notification must be made by the supplier of water within 24 hours of learning of the violation.

### Appendix 13-8

#### Required Minimum Grade for Water Treatment Plants and Distribution System Operators

(Source: 10 NYCRR 5-4.2) [Added January 1998]

| Plant type   | Operator | Assistant operator |
|--|----------|--------------------|
| Water treatment plant with facilities for filtration which treats over 2.5 MGD (million gal/day)                       | IA       | IIA                |
| Water treatment plant with facilities for filtration which treats 2.5 MGD or less                                      | IIA      | IIA                |
| Water treatment plant without facilities for filtration which treats over 2.5 MGD                                      | IB       | IIB                |
| Water treatment plant without facilities for filtration which treats 2.5 MGD or less and serves more than 1,000 people | IIB      | C                  |
| Water treatment plant without facilities for filtration that serves 1,000 people or less                               | C        | None required      |
| Distribution system serving 1,000 people or more   | D        | None required      |

## Appendix 13-9

### Standards of Raw Water Quality

(Source: 10 NYCRR 170.4) [Citation Revised January 1998]

| Items  | Specifications  |
|--|---|
| 1. Floating solids; settleable solids; oil; sludge deposits; tastes or odor producing substances | None attributable to sewage, industrial wastes, or wastes.  |
| 2. Sewage or water effluents   | None which are not effectively disinfected.   |
| 3. pH  | Range between 6.5 and 8.5   |
| 4. Dissolved oxygen  | For trout waters, greater than 5.0 ppm; for nontrout waters greater than 4.0 ppm.   |
| 5. Toxic wastes, oil, deleterious substances, colored or other wastes or heated liquids          | None alone or in combination with other substances or wastes in sufficient amounts or at such temperatures as to make the waters unsafe or unsuitable as a water supply for drinking, culinary or food processing purposes. Provided further, that the concentration or quantity of the constituents hereinafter set forth must not be exceed the allowable limits established therefore. |
| 6. Turbidity   | 5 NTU   |
| 7. Microbiological   |   |
| Coliform organism  | 50 per 100 mL   |
| 8. Inorganic chemicals   | (Concentration in mg/L)   |
| Ammonia (NH <sub>3</sub> )   | <.0   |
| Arsenic (As)   | 0.05  |
| Barium (Ba)  | 1.0   |
| Boron (B)  | 1.0   |
| CCE  | 0.2   |
| Cadmium (Cd)   | 0.01  |
| Chloride (Cl)  | 250   |
| Chromium (Hexavalent) (Cr+6)   | 0.05  |
| Copper (Cu)  | <0.2  |
| Cyanide (CN)   | <0.1  |
| Fluoride (F)   | <0.5  |
| Lead (Pb)  | 0.05  |
| Mercury (Hg)   | 0.005   |
| Nitrates (NO <sub>3</sub> ) + Nitrates (NO <sub>2</sub> )  | 10  |
| Selenium (Se)  | 0.01  |
| Silver (Ag)  | 0.05  |
| Sodium (Na)  | <0  |
| Sulfate (SO <sub>4</sub> )   | 250   |
| Total dissolved solids   | 500   |
| Uranyl ion   | <0.0  |
| Zinc (Zn)  | < 0.3   |
| 9. Organic Chemicals   | (Concentration in mg/L)   |
| Organic nitrogen   | 0.5   |
| Oxygen consumed  | 2.0   |
| Phenols  | 0.001   |
| 10. Pesticides   |   |
| Aldrin   | 0.017   |
| Chlordane  | 0.008   |
| DDT  | 0.042   |
| Dieldrin   | 0.017   |
| Endrin   | 0.001   |
| Heptachlor   | 0.018   |

| Items                           | Specifications           |
|---------------------------------|--------------------------|
| Heptachlor epoxide              | 0.018                    |
| Herbicides                      | 0.01                     |
| Lindane                         | 0.056                    |
| Methoxychlor                    | 0.085                    |
| Organic phosphates + carbamates | 0.1                      |
| Toxaphenes                      | 0.005                    |
| 11. Radioactivity               | (Concentration in pCi/L) |
| Gross beta                      | 1000                     |
| Radium - 226                    | 8                        |
| Strontium - 90                  | 10                       |

## Appendix 13-10

### Narrative Water Quality Standards

(Source: 6 NYCRR 703.2) [Revised March 2008]

| Parameters  | Classes  | Standard   |
|---|--|--|
| Taste-, color-, and odor-producing toxic and other deleterious substances | AA, A, B, C, D, SA, SB, SC, I, SD, A-Special, GA, GSA, GSB | None in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages.                             |
| Turbidity   | AA, A, B, C, D, SA, SB, SC, I, SD                          | No increase that will cause a substantial visible contrast to natural conditions.  |
| Suspended, colloidal, and settleable solids                               | AA, A, B, C, D, SA, SB, SC, I, SD, A-Special               | None from sewage, industrial wastes, or other wastes that will cause deposition or impair the waters for their best usages.                          |
| Oil and floating substances   | AA, A, B, C, D, SA, SB, SC, I, SD, A-Special               | No residue attributable to sewage, industrial wastes, or other wastes nor visible oil film nor globules of grease.                                   |
| Garbage, cinders, ashes, oils, sludge, and other refuse                   | SA, SB, SC, I, SD  | None in any amounts.   |
| Phosphorus and nitrogen   | AA, A, B, C, D, SA, SB, SC, I, SD, A-Special               | None in amounts that will result in growths of algae, weeds, and slimes that will impair the waters for their best usages.                           |
| Radioactivity   | A-Special  | Should be kept at the lowest practicable levels, and in any event should be controlled to the extent necessary to prevent harmful effects on health. |
| Thermal discharges  | GA, GSA, GSB   | None in amounts that will impair the waters for their best usages.   |
| Thermal discharges  | AA, A, B, C, D, SA, SB, SC, I, SD, A-Special               | See 6 NYCRR Part 704; see also section WA.90.NY.   |
| Flow  | AA, A, B, C, D, A-Special                                  | No alteration that will impair the waters for their best usages.   |
|   |  |  |

## Appendix 13-11

### Water Quality Standards for pH, Dissolved Oxygen, Dissolved Solids, Odor, Color, and Turbidity (Source: 6 NYCRR 703.3) [Revised March 2008]

| Parameter             | Classes                                | Standard  |
|-----------------------|--|---|
| pH                    | AA, A, B, C, AA-Special, A-Special, GA | Must not be less than 6.5 nor more than 8.5.  |
|                       | D                                      | Must not be less than 6.0 nor more than 9.5.  |
|                       | SA, SB, SC, I, SD                      | The normal range must not be extended by more than one-tenth (0.1) of a pH unit.  |
| Dissolved oxygen (DO) | A-Special                              | In rivers and upper waters of lakes, not less than 6.0 mg/L at any time. In hypolimnetic waters, it should not be less than necessary for the support of fishlife, particularly cold water species.   |
|                       | AA, A, B, C, AA-Special                | For trout spawning waters(TS), the DO concentration must not be less than 7.0 mg/L from other than natural conditions. For trout waters, the minimum daily average must not be less than 6.0 mg/L, and at no time must the concentration be less than 5.0 mg/L. For nontrout waters, the minimum daily average must not be less than 5.0 mg/L, and at no time must the DO concentration be less than 4.0 mg/L.  |
|                       | D                                      | Must not be less than 3.0 mg/L at any time.   |
|                       | SA, SB, SC                             | Chronic: Shall not be less than a daily average of 4.8 mg/L *   |
|                       |  | Remark:*The DO concentration may fall below 4.8 mg/L for a limited number of days, as defined by the formula:<br>$DO_i = 13.0$ Where $DO_i = DO - 2.80 + 1.84e^{-0.1t_i}$<br>concentration in mg/L between 3.0 - 4.8 mg/L and $t_i$ = time in days.<br>This equation is applied by dividing the DO range of 3.0 - 4.8 mg/L into a number of equal intervals. $DO_i$ is the lower bound of each interval (i) and $t_i$ is the allowable number of days that the DO concentration can be within that interval.<br>The actual number of days that the measured DO concentration falls within each interval (i) is divided by the allowable number of days that the DO can fall within interval ( $t_i$ ). The sum of the quotients of all intervals ( $\sum \frac{i}{n}$ ) cannot exceed 1.0: i.e.,<br>$\sum_{i=1}^n \frac{t_i(\text{actual})}{t_i(\text{allowed})} < 1.0$ The DO concentration shall not fall below the acute standard of 3.0 mg/L at any time. |
|                       | SA, SB, SC, SD                         | Acute: Shall not be less than 3.0 mg/L at any time  |
|                       | I                                      | Must not be less than 4.0 mg/L at any time.   |
| Dissolved solids      | A-Special                              | Must not exceed 200 mg/L  |
|                       | AA, A, B, C, AA-Special, GA            | Must be kept as low as practicable to maintain the best usage of waters but in no case must it exceed 500 mg/L.   |
| Odor                  | GA                                     | Must not exceed a threshold odor number of 3.   |
| Color                 | GA                                     | Must not exceed 15 color units (platinum-cobalt method).  |
| Turbidity             | GA                                     | Must not exceed 5 NTU.  |



## Appendix 13-12

### Groundwater Effluent Standards - Class GA

(Source: 6 NYCRR 703.6 (e) Table 3) [Revised January 1998; Revised January 1999; Revised January 2000; Revised March 2008; Citation Revised March 2009]

| Substance  | CAS No.              | Maximum Allowable Concentration (ug/L)            |
|--|----------------------|---|
| Acetaldehyde   | 75-07-0              | 8   |
| Alachlor   | 15972-60-8           | 0.5   |
| Aldicarb and Methomyl  | 116-06-3; 16752-77-5 | 0.35  |
| Aldrin   | 309-00-2             | Not Detectable                                    |
| Aluminum   | Not Applicable       | 2,000   |
| Antimony   | Not Applicable       | 6   |
| Arsenic  | Not Applicable       | 50  |
| Asbestos (fibers >10um)  | Not Applicable       | 1.4 x 10 <sup>7</sup> (fibers/L)                  |
| Atrazine   | 1912-24-9            | 7.5   |
| Azinphosmethyl   | 86-50-0              | 4.4   |
| Barium   | Not Applicable       | 2,000   |
| Benefin  | 1861-40-1            | 35  |
| Benzene  | 71-43-2              | 1   |
| Benzo(a)pyrene   | 50-32-8              | Not Detectable                                    |
| Bis(2-chloroethyl)ether  | 111-44-4             | 1.0   |
| Bis(2-ethylhexyl)phthalate   | 117-81-7             | 5   |
| Bromacil   | 314-40-9             | 4.4   |
| Butachlor  | 23184-66-9           | 3.5   |
| Cadmium  | Not Applicable       | 10  |
| Captan   | 133-06-2             | 18  |
| Carbaryl   | 63-25-2              | 29  |
| Carbon disulfide   | 75-15-0              | 120   |
| Carbon tetrachloride   | 56-23-5              | 5   |
| Chloramben{ 1 }  | Not Applicable       | 50  |
| Chlordane  | 57-74-9              | 0.05  |
| Chloride   | Not Applicable       | 500,000   |
| Chlorinated dibenzo-p-dioxins and Chlorinated dibenzofurans  | Not Applicable       | 7 x 10 <sup>-7</sup> equivalents of 2,3,7,8-TCDD* |
| Remark: * Value is for the total of the chlorinated dibenzo-p-dioxins and chlorinated dibenzofurans as equivalents of 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) as specified by the Class GA H(WS) standard in Table 1 of section 703.5 of this Part. |                      |   |
| Chloroform   | 67-66-3              | 7   |
| Chromium (Hexavalent)  | Not Applicable       | 100   |
| Copper   | Not Applicable       | 400   |
| Cyanide  | Not Applicable       | 400   |
| p,p'-DDD   | 72-54-8              | 0.3   |
| p,p'-DDE   | 72-55-9              | 0.2   |
| p,p'-DDT   | 50-29-3              | 0.2   |
| Diazinon   | 333-41-5             | 0.7   |
| 1,2-Dibromo-3-chloropropane  | 96-12-8              | 0.04  |
| Di-n-butylphthalate  | 84-74-2              | 50  |
| Dicamba  | 1918-00-9            | 0.44  |
| 1,2-Dichlorobenzene  | 95-50-1              | 3   |
| 1,3-Dichlorobenzene  | 541-73-1             | 3   |
| 1,4-Dichlorobenzene  | 106-46-7             | 3   |

| Substance  | CAS No.                                     | Maximum Allowable Concentration (ug/L) |
|--|---|--|
| 1,2-Dichloroethane                                 | 107-06-2                                    | 0.6                                    |
| 2,4-Dichlorophenoxyacetic acid (2,4-D)             | 94-75-7                                     | 50                                     |
| 1,2-Dichloropropane                                | 78-87-5                                     | 1                                      |
| 1,3-Dichloropropene (sum of cis-and trans isomers) | 542-75-6 (sum of 10061-01-5 and 10061-02-6) | 0.4                                    |
| Dieldrin   | 60-57-1                                     | 0.004                                  |
| Di(2-ethylhexyl)adipate                            | 103-23-1                                    | 20                                     |
| N,N-Dimethylaniline                                | 121-69-7                                    | 1                                      |
| Diphenylhydrazine                                  | 122-66-7                                    | Not Detectable                         |
| Diquat   | 2764-72-9                                   | 20                                     |
| Endrin   | 72-20-8                                     | Not Detectable                         |
| Ethylene dibromide                                 | 106-93-4                                    | 6 x 10 <sup>[-4]</sup>                 |
| Ethylenethiourea                                   | 96-45-7                                     | Not Detectable                         |
| Ferbam   | 14484-64-1                                  | 4.2                                    |
| Fluoride   | Not Applicable                              | 3,000                                  |
| Foaming agents{2}                                  | Not Applicable                              | 1,000                                  |
| Folpet   | 133-07-3                                    | 50                                     |
| Formaldehyde                                       | 50-00-0                                     | 8                                      |
| Heptachlor   | 76-44-8                                     | 0.04                                   |
| Heptachlorepoxyde                                  | 1024-57-3                                   | 0.03                                   |
| Hexachlorobenzene                                  | 118-74-1                                    | 0.04                                   |
| Hexachlorobutadiene                                | 87-68-3                                     | 0.5                                    |
| alpha-Hexachlorocyclohexane                        | 319-84-6                                    | 0.01                                   |
| beta-Hexachlorocyclohexane                         | 319-85-7                                    | 0.04                                   |
| delta-Hexachlorocyclohexane                        | 319-86-8                                    | 0.04                                   |
| epsilon-Hexachlorocyclohexane                      | 6108-10-7                                   | 0.04                                   |
| gamma-Hexachlorocyclohexane                        | 58-89-9                                     | 0.05                                   |
| Hexachlorophene                                    | 70-30-4                                     | See Note 3                             |
| Iron{4}  | Not Applicable                              | 600                                    |
| Kepone   | 143-50-0                                    | Not Detectable                         |
| Lead   | Not Applicable                              | 50                                     |
| Malathion  | 121-75-5                                    | 7.0                                    |
| Mancozeb   | 8018-01-7                                   | 1.8                                    |
| Maneb  | 12427-38-2                                  | 1.8                                    |
| Manganese{4}                                       | Not Applicable                              | 600                                    |
| Mercury  | Not Applicable                              | 1.4                                    |
| Methoxychlor                                       | 72-43-5                                     | 35                                     |
| 2-Methyl-4-chloro-phenoxyacetic acid               | 94-74-6                                     | 0.44                                   |
| Methylene chloride (Dichloro-methane)              | 75-09-2                                     | 5                                      |
| Methyl methacrylate                                | 80-62-6                                     | 50                                     |
| Metolachlor  | 51218-45-2                                  | 10                                     |
| Mirex  | 2385-85-5                                   | 0.03                                   |
| Nabam  | 142-59-6                                    | 1.8                                    |
| Nickel   | Not Applicable                              | 200                                    |
| Nitralin   | 4726-14-1                                   | 35                                     |
| Nitrate (expressed as N)                           | Not Applicable                              | 20,000                                 |
| Nitrate and Nitrite (expressed                     | Not Applicable as N)                        | 20,000                                 |

| Substance                             | CAS No.            | Maximum Allowable Concentration (ug/L) |
|---------------------------------------|--------------------|--|
| Nitrilotriacetic acid{5}              | Not Applicable     | 3                                      |
| Oil and Grease                        | Not Applicable     | 15,000                                 |
| Paraquat                              | 4685-14-7          | 3.0                                    |
| Parathion and Methyl parathion        | 56-38-2; 298-00-0  | 1.5                                    |
| Pentachloronitrobenzene               | 82-68-8            | Not Detectable                         |
| pH                                    | Not Applicable     | See Note 6                             |
| Phenolic compounds (total phenols)    | Not Applicable     | 2                                      |
| Phorate and Disulfoton                | 298-02-2; 298-04-4 | Not Detectable                         |
| Polychlorinated biphenyls             | Not Applicable     | 0.09                                   |
| Propachlor                            | 1918-16-7          | 35                                     |
| Propanil                              | 709-98-8           | 7.0                                    |
| Propazine                             | 139-40-2           | 16                                     |
| Selenium                              | Not Applicable     | 20                                     |
| Silver                                | Not Applicable     | 100                                    |
| Simazine                              | 122-34-9           | 0.5                                    |
| Styrene                               | 100-42-5           | 5                                      |
| Sulfate                               | Not Applicable     | 500,000                                |
| Sulfide                               | Not Applicable     | 1,000                                  |
| Thiram                                | 137-26-8           | 1.8                                    |
| Toxaphene                             | 8001-35-2          | Not Detectable                         |
| 1,1,2-Trichloroethane                 | 79-00-5            | 1                                      |
| Trichloroethene                       | 79-01-6            | 5                                      |
| 2,4,5-Trichlorophenoxy-acetic acid    | 93-76-5            | 35                                     |
| 2,4,5-Trichlorophenoxy-propionic acid | 93-72-1            | 0.26                                   |
| Trifluralin                           | 1582-09-8          | 35                                     |
| Vinyl chloride                        | 75-01-4            | 2                                      |
| Zinc                                  | Not Applicable     | 5,000                                  |
| Zineb                                 | 12122-67-7         | 1.8                                    |
| Ziram                                 | 137-30-4           | 4.2                                    |

{1} Includes related forms that convert to the organic acid upon acidification to a pH of 2 or less; and esters of the organic acid.

{2} Foaming agents determined as methylene blue active substances (MBAS) or other tests as specified by the commissioner.

{3} Refer to groundwater effluent limitation for "Phenolic compounds (total phenols)".

{4} Combined concentration of iron and manganese shall not exceed 1000 ug/L.

{5} Includes related forms that convert to nitrilotriacetic acid upon acidification to a pH of 2.3 or less.

{6} pH shall not be lower than 6.5 or the pH of the natural groundwater, whichever is lower, nor shall be greater than 8.5 or the pH of the natural groundwater, whichever is greater.

In addition to the effluent limitations above, the following also apply in the counties of Nassau and Suffolk:

| Substance                   | Maximum Allowable Concentration in mg/L |
|-----------------------------|---|
| (1) Dissolved solids, total | 1,000                                   |
| (2) Nitrogen, total (as N)  | 10                                      |

## Appendix 13-13

### Required Minimum Separation Distances to Protect Water Wells From Contamination Contaminant Source (Source: 10 NYCRR Appendix 5-1, 5-B.7) [Added March 2006; Citation Revised March 2008]

| Contaminant Source   | Distance <sup>1</sup><br>(Feet) |
|--|---------------------------------|
| Chemical storage sites not protected from the elements (e.g., salt and sand/salt storage) <sup>2</sup>                                   | 300                             |
| Landfill waste disposal area, or hazardous or radiological waste disposal area <sup>2</sup>  | 300                             |
| Land surface application or subsurface injection of effluent or digested sludge from a Municipal or public wastewater treatment facility | 200                             |
| Land surface application or subsurface injection of septage waste  | 200                             |
| Land surface spreading or subsurface injection of liquid or solid manure <sup>3</sup>  | 200                             |
| Storage Areas for Manure piles <sup>4</sup>  | 200                             |
| Barnyard, silo, barn gutters and animal pens <sup>5,6</sup>  | 100                             |
| Cesspools (i.e. pits with no septic tank pretreatment)   | 200                             |
| Wastewater treatment absorption systems located in coarse gravel or in the direct path of drainage to a well                             | 200                             |
| Fertilizer and/or pesticide mixing and/or clean up areas   | 150                             |
| Seepage pit (following septic tank) <sup>5</sup>   | 150                             |
| Underground single walled chemical or petroleum storage vessels  | 150                             |
| Absorption field or bed <sup>5</sup>   | 100                             |
| Contained chemical storage sites protected from the elements (e.g., salt and sand/salt storage within covered structures) <sup>7</sup>   | 100                             |
| Septic system components (non-watertight) <sup>5</sup>   | 100                             |
| Intermittent sand filter without a watertight liner <sup>5</sup>   | 100                             |
| Sanitary Privy pit <sup>5</sup>  | 100                             |
| Surface wastewater recharge absorption system constructed to discharge storm water from parking lots, roadways or driveways <sup>5</sup> | 100                             |
| Cemeteries   | 100                             |
| Sanitary privy with a watertight vault   | 50                              |
| Septic tank, aerobic unit, watertight effluent line to distribution box  | 50                              |
| Sanitary sewer or combined sewer   | 50                              |
| Surface water recharge absorption system with no automotive-related Wastes (e.g., clear-water basin, clear-water dry well)               | 50                              |
| Stream, lake, watercourse, drainage ditch, or wetland  | 25                              |
| All known sources of contamination otherwise not shown above   | 100                             |

<sup>1</sup> The listed water well separation distances from contaminant sources shall be increased by 50 percent whenever aquifer water enters the water well at less than 50 feet below grade. If a 50 percent increase in separation distances can not be achieved, then the greatest possible increase in separation distance shall be provided with such additional measures as needed to prevent contamination.

<sup>2</sup> Water wells shall not be located in a direct line of flow from these items, nor in any contaminant plume created by these items, except with such additional measures (e.g., sentinel groundwater monitoring, hydraulic containment, source water treatment) as needed to prevent contamination.

<sup>3</sup> Based upon on-site evaluations of agricultural properties done per agricultural environmental management (AEM) or comprehensive nutrient management plan (CNMP) programs by a certified nutrient management planner or soil and water conservation district (SWCD) official, water wells may be located a minimum of 100 feet from areas subject to land spreading of manure.

<sup>4</sup> Water wells may be located 100 feet from temporary (30 days or less) manure piles/staging areas that are controlled to preclude contamination of surface or groundwater or 100 feet from otherwise managed manure piles that are controlled pursuant to regulation in a manner that prevents contamination of surface or groundwater.

<sup>5</sup> When these contamination sources are located in coarse gravel or are located upgrate and in the direct path of drainage to a water well, the water well shall be located at least 200 feet away from the closest part of these sources.

<sup>6</sup> Animal pen does not include small pet shelters or kennels housing 3 or fewer adult pets.

<sup>7</sup> Chemical storage sites as used in this entry do not include properly maintained storage areas of chemicals used for water treatment nor areas of household quantities of commonly used domestic chemicals.

## **Appendix 13-14**

### **Water Classifications**

(Source: 6 NYCRR 701.2 through 701.17) [Added March 2009]

#### **Section 701.2. Class N Fresh Surface Waters**

- (a) The best usages of Class N waters are the enjoyment of water in its natural condition and, where compatible, as a source of water for drinking or culinary purposes, bathing, fishing, fish propagation, and recreation. The waters shall be suitable for shellfish and wildlife propagation and survival and fish survival.
- (b) There shall be no discharge of sewage, industrial wastes, or other wastes, waste effluents or any sewage effluents not having had filtration resulting from at least 200 feet of lateral travel through unconsolidated earth. A greater distance may be required if inspection shows that, due to peculiar geologic conditions, this distance is inadequate to protect the water from pollution.
- (c) These waters shall contain no deleterious substances, hydrocarbons or substances that would contribute to eutrophication, nor shall they receive surface runoff containing any such substance.
- (d) There shall be no alteration to flow that will impair the waters for their best usages.

#### **Section 701.3. Class AA--Special (AA-S) Fresh Surface Waters**

- (a) The best usages of Class AA-S waters are: a source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing. The waters shall be suitable for fish, shellfish, and wildlife propagation and survival.
- (b) These waters shall contain no floating solids, settleable solids, oil, sludge deposits, toxic wastes, deleterious substances, colored or other wastes or heated liquids attributable to sewage, industrial wastes or other wastes.
- (c) There shall be no discharge or disposal of sewage, industrial wastes or other wastes into these waters.
- (d) These waters shall contain no phosphorus and nitrogen in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.
- (e) There shall be no alteration to flow that will impair the waters for their best usages.
- (f) There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions.

#### **Section 701.4. Class A--Special (A-S) Fresh Surface Waters**

- (a) The best usages of Class A-S waters are: a source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing. The waters shall be suitable for fish, shellfish, and wildlife propagation and survival.
- (b) This classification may be given to those international boundary waters that, if subjected to approved treatment, equal to coagulation, sedimentation, filtration and disinfection with additional treatment, if necessary, to reduce naturally present impurities, meet or will meet New York State Department of Health drinking water standards and are or will be considered safe and satisfactory for drinking water purposes.

#### **Section 701.5. Class AA Fresh Surface Waters**

- (a) The best usages of Class AA waters are: a source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing. The waters shall be suitable for fish, trout, and wildlife propagation and survival.
- (b) This classification may be given to those waters that, if subjected to approved disinfection treatment, with additional treatment if necessary to remove naturally present impurities, meet or will meet New York State Department of Health drinking water standards and are or will be considered safe and satisfactory for drinking water purposes.

#### **Section 701.6. Class A Fresh Surface Waters**

- (a) The best usages of Class A waters are: a source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing. The waters shall be suitable for fish, shellfish, and wildlife propagation and survival.
- (b) This classification may be given to those waters that, if subjected to approved treatment equal to coagulation, sedimentation, filtration and disinfection, with additional treatment if necessary to reduce naturally present impurities, meet or will meet New York State Department of Health drinking water standards and are or will be considered safe and satisfactory for drinking water purposes.

#### **Section 701.7. Class B Fresh Surface Waters**

The best usages of Class B waters are primary and secondary contact recreation and fishing. The waters shall be suitable for fish, shellfish, and wildlife propagation and survival

Section 701.8. Class C Fresh Surface Waters

The best usage of Class C waters is fishing. The waters shall be suitable for fish, shellfish, and wildlife propagation and survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.

Section 701.9. Class D Fresh Surface Waters

The best usage of Class D waters is fishing. Due to such natural conditions as intermittency of flow, water conditions not conducive to propagation of game fishery, or stream bed conditions, the waters will not support fish propagation. These waters shall be suitable for fish, shellfish, and wildlife survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.

Section 701.10. Class SA Saline Surface Waters

The best usages of Class SA waters are shellfishing for market purposes, primary and secondary contact recreation and fishing. The waters shall be suitable for fish, shellfish, and wildlife propagation and survival.

Section 701.11. Class SB Saline Surface Waters

The best usages of Class SB waters are primary and secondary contact recreation and fishing. The waters shall be suitable for fish, shellfish, and wildlife propagation and survival.

Section 701.12. Class SC Saline Surface Waters

The best usage of Class SC waters is fishing. The waters shall be suitable for fish, shellfish, and wildlife propagation and survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.

Section 701.13. Class I Saline Surface Waters

The best usages of Class I waters are secondary contact recreation and fishing. The waters shall be suitable for fish, shellfish, and wildlife propagation and survival.

Section 701.14. Class SD Saline Surface Waters

The best usage of Class SD waters is fishing. These waters shall be suitable for fish, shellfish, and wildlife survival. This classification may be given to those waters that, because of natural or man-made conditions, cannot meet the requirements for primary and secondary contact recreation and fish propagation.

Section 701.15. Class GA Fresh Groundwaters

The best usage of Class GA waters is as a source of potable water supply. Class GA waters are fresh groundwaters.

Section 701.16. Class GSA Saline Groundwaters

The best usages of Class GSA waters are as a source of potable mineral waters, for conversion to fresh potable waters, or as raw material for the manufacture of sodium chloride or its derivatives or similar products. Class GSA waters are saline groundwaters.

Section 701.17. Class GSB Saline Groundwaters

The best usage of Class GSB waters is as a receiving water for disposal of wastes. Class GSB waters are saline groundwaters that have a chloride concentration in excess of 1,000 milligrams per liter or a total dissolved solids concentration in excess of 2,000 milligrams per liter.

## Appendix 13-15

### Total And Fecal Coliform Standards

(Source: 6 NYCRR 703.4) [Added March 2009]

(a) Total coliforms (number per 100 ml).

| Classes            | Standard   |
|--------------------|--|
| AA                 | The monthly median value and more than 20 percent of the samples, from a minimum of five examinations, shall not exceed 50 and 240, respectively.      |
| A, B, C, D, SB, SC | The monthly median value and more than 20 percent of the samples, from a minimum of five examinations, shall not exceed 2,400 and 5,000, respectively. |
| SA                 | The median most probable number (MPN) value in any series of representative samples shall not be in excess of 70.                                      |
| I                  | The monthly geometric mean, from a minimum of five examinations, shall not exceed 10,000.  |
| A-Special          | The geometric mean, of not less than five samples, taken over not more than a 30-day period shall not exceed 1,000.                                    |
| GA                 | The maximum allowable limit is 50.   |

(b) Fecal coliforms (number per 100 ml).

| Classes            | Standard  |
|--------------------|---|
| A, B, C, D, SB, SC | The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.                            |
| I                  | The monthly geometric mean, from a minimum of five examinations, shall not exceed 2,000.                          |
| A-Special          | The geometric mean, of not less than five samples, taken over not more than a 30-day period shall not exceed 200. |

(c) The total and fecal coliform standards for classes B, C, D, SB, SC, and I shall be met during all periods:

- (1) when disinfection is required for SPDES permitted discharges directly into, or affecting the best usage of, the water;  
or
- (2) when the department determines it necessary to protect human health.





|   |                                    |  |  |                                       |  |
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| <b>REPORT DOCUMENTATION PAGE</b>  |                                    |  | <i>Form Approved</i><br><i>OMB No. 0704-0188</i> |                                       |  |
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| <b>1. REPORT DATE (DD-MM-YYYY)</b><br>March 2010  |                                    | <b>2. REPORT TYPE</b><br>Final   |  | <b>3. DATES COVERED (From - To)</b>   |  |
| <b>4. TITLE AND SUBTITLE</b><br>The Environmental Assessment and Management (TEAM) Guide:<br>New York Supplement  |                                    | <b>5. FUNDING NUMBERS</b><br><br>AEC: MIPR 0010005589<br>ANG: F9WFEV0028G001<br>NGB: W45XMA00130245<br>Commerce: 1301-09-SA00110<br>Army Reserve: MIPR10CODCD201<br>USACE: 96x3123<br>DHS: HAHQDC-09-X-00436<br>DLA: MIPR SP1001090<br>USPS: MOA-05-CERL-01<br>State Department: IAG<br>F3NF369350G002 |  |                                       |  |
| <b>6. AUTHOR(S)</b><br>Carolyn O'Rourke and Patricia A. Kemme   |                                    |  |  |                                       |  |
| <b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b><br>U.S. Army Engineer Research and Development Center (ERDC)<br>Construction Engineering Research Laboratory (CERL)<br>PO Box 9005<br>Champaign, IL 61826-9005  |                                    | <b>8. PERFORMING ORGANIZATION REPORT NUMBER</b><br>ERDC/CERL SR-06-15<br>Revised March 2010  |  |                                       |  |
| <b>9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b><br><br>See the report Preface for a complete list of the sponsors.   |                                    | <b>10. SPONSOR/MONITOR'S ACRONYM(S)</b>  |  |                                       |  |
|   |                                    | <b>11. SPONSOR/MONITOR'S REPORT NUMBER(S)</b>  |  |                                       |  |
| <b>12. DISTRIBUTION / AVAILABILITY STATEMENT</b><br>Approved for public release; distribution is unlimited.   |                                    |  |  |                                       |  |
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| <b>14. ABSTRACT</b><br><br>Environmental assessments help determine compliance with current environmental regulations. The U.S. Air Force, U.S. Army, Defense Logistics Agency (DLA), and Corps of Engineers (Civil Works) have adopted environmental compliance programs that identify compliance problems before they are cited as violations by the U.S. Environmental Protection Agency.<br><br>Since 1984, the U.S. Army Construction Engineering Research Laboratory, in cooperation with numerous Department of Defense (DOD) components, has developed environmental compliance assessment checklist manuals. The Environmental Assessment and Management (TEAM) Guide was developed for use by all DOD components. Currently there are five participating DOD components: the Air Force, Air National Guard, Army, Civil Works, and DLA. These agencies have agreed to share the development and maintenance of this Guide.<br><br>The Guide combines Code of Federal Regulations and management practices into a series of checklists that show legal requirements and the specific operations or items to review. TEAM Guide is supplemented by DOD component-specific manuals detailing DOD component regulations and policies. The New York Supplement was developed to be used in conjunction with the TEAM Guide, using existing New York state environmental legislation and regulations as well as suggested management practices. |                                    |  |  |                                       |  |
| <b>15. SUBJECT TERMS</b><br>Environmental Compliance Assessment and Management Program, environmental compliance checklists, The Environmental Assessment and Management (TEAM) Guide, environmental compliance laws and regulations  |                                    |  |  |                                       |  |
| <b>16. SECURITY CLASSIFICATION OF:</b>  |                                    |  | <b>17. LIMITATION OF ABSTRACT</b><br><br>SAR     | <b>18. NUMBER OF PAGES</b><br><br>662 | <b>19a. NAME OF RESPONSIBLE PERSON</b><br>Carolyn O'Rourke |
| <b>a. REPORT</b><br>Unclassified  | <b>b. ABSTRACT</b><br>Unclassified | <b>c. THIS PAGE</b><br>Unclassified  |  |                                       | <b>19b. TELEPHONE NUMBER</b><br>217-398-5553               |